

22500610586

PROVINCIAL
MEDICAL & SURGICAL JOURNAL.

EDITED JOINTLY FOR THE
PROVINCIAL MEDICAL AND SURGICAL
ASSOCIATION.

BY

WILLIAM HARCOURT RANKING, M.D., CANTAB.,

AND

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1849.

LONDON: JOHN CHURCHILL, PRINCES STREET, SOHO.
WORCESTER: DEIGHTON AND CO., HIGH STREET.

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PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A CLINICAL LECTURE,

DELIVERED AT THE LEEDS PUBLIC DISPENSARY.

By J. D. HEATON, M.D., Senior Physician
to the Dispensary.

CORRODING ULCER OF THE UTERUS; ULCERATIONS
OF THE STOMACH; TUBERCLE AND MELANOSIS
OF THE LUNGS; &c.

Mary Holmes, aged 61, a widow; has borne a family. She has supported herself by washing so long as she was able to work. She has been out of health for three or four years, during which time she has had much medical treatment from different practitioners, who have successively given her up without much benefit. For the last two years she has been confined to bed. She has been subject to large and repeated uterine hæmorrhages, during the intervals between which there has been a profuse uncoloured discharge from the vagina, which she describes as watery. She has had frequent pain in the uterine region and in the loins, but not very severe. She has, likewise, been subject to pain at the stomach, but not very severe. She has had much nausea and frequent vomiting. She has occasional attacks of severe cough, occurring from time to time, accompanied with considerable expectoration, but not bloody, and again subsiding. She is, likewise, subject to violent attacks of dyspnoea, amounting to orthopnoea, which leave her spontaneously after a time. She had a fit, which was called apoplectic, about twelve months since; and she has had several fits of a similar nature, more recently.

At the time that she came under my care, she was in a state of great debility and prostration; the face had a shrunken appearance, but was not very pale. She had much throbbing, and a confused sensation in the head; the memory was much impaired, and her answers to questions were uncertain and confused. The pulse was frequent, very small and feeble, occasionally almost imperceptible at the wrist; feet cold; some œdema of both hands and feet. Shortness of breath not very oppressive at this time, nor cough very troublesome. Slight wandering pains over the body, principally at the epigastrium; but little pain or tenderness in the hypogastric region. No uterine hæmorrhage at this time, nor for some time previously, but a considerable watery discharge *per vaginam*. Urine passed freely; bowels constipated; tongue clean and moist. Owing to the great prostration of the patient, no auscultation

of the thoracic organs was attempted; and all vaginal examination was absolutely disallowed.

The more immediate indication of treatment, in this case, was to revive the patient from the excessive state of prostration in which she was sunk, and to improve the quality of the blood deteriorated by frequent hæmorrhages and wasting discharges. Strong beef-tea and other nutritious food in a liquid form, were ordered for her diet, (wine would have been desirable had her circumstances enabled her to procure it,) the medicine was as follows:—

R. Mist. Ferri Co., oz. viij.; Tinct. Cardamomi Co., dr. vj.; Tinct. Hoscymi, dr. ij. M. Sumat oz. j., quater die.

R. Pil. Rhæi Co., gr. iij.; Pil. Hydrargyri, gr. ij. M. Fiat pil. hora somni sumenda.

This medicine agreed with her, and under this treatment, for a few days, she considerably improved. She had somewhat more power; the confusion and pain in the head were relieved, but the appetite was very poor, so that she took much less support than I should have wished, and the pulse was still very feeble.

The same treatment was continued; but, in a day or two afterwards she considerably deteriorated, much hæmorrhage again occurred, and returned several times; there was no perceptible enlargement over the uterus, and but little pain or tenderness. The bowels now became obstinately confined; mild remedies were used in the first place, and afterwards more active ones, but without success. Vomiting soon followed, and everything that was taken, either as food or medicine was speedily rejected, except one or two full doses of calomel, which remained, but did not produce any action of the bowels. This obstinate constipation and vomiting continued several days. Enemata were again expelled without producing any action, till one was administered containing two drops of croton oil, when much indurated fæces were evacuated, requiring, however, some mechanical assistance for their removal, owing to the great weakness of the patient. But the stomach remained incapable of retaining any food, though every means that could be suggested was tried for allaying its irritability; and this, together with continual returns of uterine hæmorrhage, reduced her to the last stage of prostration. She lingered a few days without much pain, the extremities lost all natural warmth, the pulse became imperceptible at the wrist, and she died of inanition about three weeks after her admission, and having been a fortnight almost without

any support, except a little brandy and water taken occasionally.

The examination was made forty-eight hours after death.

The body did not present a very emaciated appearance; there was but little oedema of the extremities. In the thorax, the lungs were free from pleuritic adhesions. The upper lobe of each lung had the surface irregularly puckered, and contained in its substance several of those hard circumscribed masses usually regarded as a chronic form of tubercular disease; but there were no softened tubercles, nor tubercular cavities. Of these masses, the smaller ones were dense and cartilaginous, and of the same dark colour throughout; the larger ones contained much earthy matter in the centre, of a grey colour; of these the largest was surrounded by a well-defined sac of false membrane, and contained in the centre a mass of solid earthy matter, of a drab colour, friable, but sufficiently hard to resist the knife. There were also a few small spherical masses of grey semi-transparent induration, about the size of a coriander seed, scattered through the substance of the lungs. In other parts, the substance of the lungs seemed to have its healthy structure, being soft and spongy, but very slightly crepitant, owing to an unusual dryness of the tissue, so that on making a section, scarcely any fluid would exude by pressure. A section presented an unusually dark colour, marbled with various shades of dark grey and purple. There were a few emphysematous dilatations along the margins of the lungs. In some of the bronchial tubes, the lining membrane was of a pale colour and quite healthy; in others it was red, thickened, and indurated; but the tubes were not dilated. Around the large bronchial tubes at the root of the left lung were several melanomatous tumours, some embedded in the substance of the lung, others upon the surface. These were rounded bodies from the size of a pea to that of a small grape, consisting of a membranous capsule, enclosing a dense black liquid, very much of the appearance and consistence of black paint, but not oily. One of the bronchial tubes was traced into one of these melanotic capsules, in which it seemed to terminate. Some bronchial glands were much enlarged, and filled with earthy matter, surrounded by a black melanotic substance, similar to that above mentioned, but more solid. The heart was somewhat hypertrophied, and there was some thickening and induration both of the aortic and mitral valves, slightly also of the tricuspid valve. In the abdomen, the stomach appeared large; the lining membrane presented no appearance of vascularity, and was unusually pale, except along the course of the larger curvature, which presented some irregular black patches; this discolouration was somewhat lessened by washing, but there still remained brownish black stains of the mucous membrane, which were quite permanent. Irregularly scattered over the surface of the stomach were numerous small circular ulcerations, of the size of the circumference of a pea, and smaller. These were superficial, not passing deeper than the mucous membrane, without any

thickening or induration of the edges, or vascularity around; the bottom of the ulcers was uneven, and generally stained of a black colour. Nothing remarkable was observed in the intestines or other abdominal viscera. The uterus was not above the ordinary size in females who have borne children. The neck of the uterus was entirely removed by ulceration, which had invaded likewise the body of the organ, spreading chiefly on the inner surface. The ulceration had a dirty brown colour, and an irregularly granular surface. The cavity of the uterus was occupied by a thick brownish red fluid. Preparations of the uterus, stomach, and lungs, are preserved in the museum of the Leeds School of Medicine.

The chief interest of this case depends on the *post-mortem* examination, which disclosed a combination of several morbid states of not very common occurrence. The most prominent disease, at the time of the patient's admission, was that of the uterus. Here there had evidently been serious disease for a long time. The frequent hæmorrhages, alternating with a thin watery discharge, and the age of the patient, might have led to the suspicion of cancer of this organ, but other symptoms did not agree with this supposition; there was not the severe lacerating pain of this disease; the pain in the uterine region was very mild and endurable, neither could any such enlargement and induration of the uterus as is usually perceptible in advanced cancerous disease be detected by the hand applied to the abdomen; the complexion, likewise, wanted the faded yellow tint generally considered so characteristic of the cancerous cachexia.

The frequent hæmorrhages, so long continued, rendered it highly probable, in the absence of the more exact proof by vaginal examination, that some form of ulcerative lesion existed; we have seen how much of the organ had been actually removed by this process of ulceration. There are different forms of ulceration of the uterus; the *os tincæ* is peculiarly subject to superficial ulcerations, consequent upon some permanent state of irritation, or low inflammation of the organ. The more general use of the *speculum* has latterly made the profession much better acquainted with this form of disease, and its frequent occurrence, upon which depends probably the larger proportion of the cases of leucorrhœa, menorrhagia, and dysmenorrhœa, which come under our notice. This affection is very common, but is very amenable to proper treatment. We are much indebted to the French physicians for our knowledge of this disease, and its mode of cure, and some English writers have recently directed the attention of the profession to this class of maladies; I may more particularly mention my friend Dr. Henry Bennet, whose long residence in the Parisian Hospitals afforded him the best opportunities of becoming acquainted with the French practice. Besides such treatment as may be suggested upon general principles, the more specific and important means for the cure of this affection is a slight application of caustic to the abraded surface, frequently repeated.

The acid nitrate of mercury is the caustic much employed in the French hospitals; I have tried both this and the nitrate of silver, and am inclined to give preference to the latter.

Besides this superficial inflammatory ulceration, which is a benignant disease amenable readily to proper treatment, the uterus is occasionally subject to a much more severe and intractable form of ulceration, frequently named corroding or phagedenic ulcer of the uterus, and of which the case we are considering furnishes a good example. This disease is sometimes spoken of as cancerous ulceration, but appears to me to differ essentially in its nature from cancer. In cancer we have the growth of a morbid tissue, which much augments the size of the organ attacked, and which may develop for a considerable time without any ulceration; but the disease of which we have here an example, *commences* with ulceration, which gradually destroys the substance of the organ, but without the formation of any morbid heterologous growth. The corroding ulcer of the uterus, when fully established, may correctly be termed a malignant disease, as it is very little amenable to treatment, and tends to advance progressively till it leads to a fatal result. It seems to be very similar to that malignant ulceration which we sometimes see on the cheek or side of the nose of elderly people, (not lupus,) which is here likewise frequently spoken of as cancer, but which seems to want the essential character of cancer,—viz., the growth of a new tissue, different from any proper to the healthy body. This disease may be distinguished from cancer of the uterus by vaginal examination, both by the touch, and by the use of the speculum. The uterus, in cancer, is much enlarged, and deformed; in this disease there is mere loss of substance. In advanced cancer a tumour may commonly be felt through the abdominal parietes. As the corroding ulcer usually attacks first the *os tincæ*, its existence may be readily ascertained by vaginal examination, but cases are described in which only the internal surface of the uterus has been attacked, and thus much of the substance of the organ has been destroyed, without any appearance externally. Here the exact diagnosis must be much more difficult, and the possibility of any effectual treatment much diminished. This disease, as well as cancer, is usually described as being accompanied with severe pain; in the case we are considering the pain was never very distressing, and I think it is always less acute in this disease than in cancer. The question has been entertained whether this phagedenic ulcer be of a syphilitic nature; I believe that this is not at all the fact; the general opinion of the most experienced practitioners is, that syphilitic ulcerations of the uterus are of very rare occurrence; venereal phagedena is much more rapid in its progress than is the disease we are considering; and, lastly, this disease occurs in persons without any suspicion of the venereal taint, as in the present instance.

The natural termination of the corroding ulcer of the uterus is in death, either by the gradual deterioration of the health and exhaustion consequent upon the

continued discharges, or sometimes more speedily by the ulceration perforating the peritoneum, and causing fatal peritonitis.

It is only when the disease is recognised in an early stage, that there is any hope of its cure, and at this early period it may be difficult to distinguish between this malignant form of ulcer, and those superficial ulcerations which I before mentioned. Indeed I think it not improbable that the latter may pass into the former, where proper treatment is neglected, and the organ continues exposed to whatever causes of irritation may have originally produced the complaint, and in a cachectic habit, where the functions of nutrition are inefficiently performed. It is evident that in the instance we have before us the disease was much too far advanced at the time of admission for the use of any curative means, even had permission been given for suitable examination; but when the ulceration is confined to the *os tincæ*, the proper treatment is free cauterization with one of the caustics I have before mentioned, together with constitutional treatment, to improve the general health, and promote nutrition. I had lately a patient having a large and deep ulceration of the *os tincæ*, with excavated edges, and which from her age and cachectic habit, I think would, most probably, if neglected, have assumed this malignant character, but which, under the treatment I have described, became completely cicatrized.

But besides the symptoms connected with the uterine disease, we had another class of symptoms referring to some disordered condition of the *primæ viæ*. These were,—the obstinate constipation which was at length overcome, and the constant vomiting of all ingesta, which continued till death. It was after the return of copious uterine hæmorrhage that the constipation occurred; this loss of blood would tend to repress the natural secretions, such as the bile and intestinal secretions, the proper stimulants of peristaltic action, and by which a soft consistence of the *fæces* is maintained. The great prostration of the patient prevented her making any effective voluntary efforts at defæcation; and, again, I think it not improbable that the coats of the rectum might have become permanently thickened and contracted by the long continued irritation occasioned by the proximity of the diseased uterus. We may add to these probable causes for the constipation, that the excessive irritability of the stomach coming on soon afterwards, so that all medicines, with the single exception of calomel, were speedily returned, prevented the effect of ordinary purgatives; so that I think we have a sufficient explanation of the constipation, which only yielded, at length, to the action of a powerfully stimulating injection; and still, her great weakness required some manual assistance for the removal of the hardened scybalæ. But in addition to this inactive state of the lower part of the canal, there was the morbid irritability of its upper extremity, the stomach. The true cause of this could only be conjectured during life; the frequent vomiting, which at length became so obstinate, and the occasional pain at the stomach, were symptoms such as might be expected to accompany this form of disease, but by

no means pathognomonic. A good deal of obscurity involves the history of these simple ulcers of the stomach; in some cases they are accompanied with symptoms such as in the present instance; in others they may go on to perforation of the stomach, causing fatal peritonitis, with no more marked symptoms than those of slight dyspepsia. Where we suspect their existence, the best treatment is by confining the patient to the mildest kind of diet, given in very small quantity at once. These ulcers are usually attributed to chronic inflammation of the mucous membrane, and where we see them surrounded by an increased vascularity, or with thickened edges, it is pretty evident that such is the true explanation; but in other cases, as in this, the surrounding mucous membrane appears in a healthy state, without any mark of inflammatory action, and then we can scarcely suppose that inflammation co-existed at the time of death, though, probably, ulceration cannot commence save in an inflamed tissue. The debility and anæmia of this patient must have strongly favoured the formation and continuance of these indolent ulcers. Perhaps we may fairly consider the ulceration of the uterus and of the stomach, as both favoured by the same constitutional imperfection.

I must say a few words upon the black stains which appeared on part of the inner surface of the stomach. Dark discolourations in this situation may depend upon different causes: blood extravasated under the mucous membrane, or congested in its vessels may assume a black colour, if acted on by any mineral acid; (if gastric juice be contained in the stomach, its muriatic acid may be sufficient to produce this effect;) sulphuretted hydrogen may also produce the same discolouration of the blood. But in this case, neither of these causes seems to have been in operation; the contents of the stomach were a small quantity of inodorous fluid,—free, therefore, from sulphuretted hydrogen, and apparently consisting only of a small draught of beer, which had been given to her at her own request a short time before she died. Besides the uniform appearance of the black patches, devoid of anything like the ramifications of vessels, and the general bloodlessness of the organ, are against the supposition of the stains being altered blood. I am inclined, therefore, to think that the black stains were of the nature of true melanosis; and this more especially as melanotic disease was distinctly evident in the lungs, and this morbid deposit has a tendency to appear in different organs in the same body.

In the lungs we found the marks of various pathological conditions,—melanosis, tubercular degeneration, chronic bronchitis, and emphysema. It is very common to find the lungs of elderly people, especially of such as have resided in a smoky manufacturing town like this, of a very dark slaty-grey colour. This is owing to the inhalation of carbonaceous particles, with which the atmosphere is loaded, into the lungs, where, being insoluble and therefore incapable of absorption, and not causing sufficient irritation to effect their removal by coughing, they gradually accumulate. It is the same cause which gives to the mucus of the nose the black

colour which you must all have observed, but which disappears during any temporary residence in a pure country air. This sort of accidental blackening of the lungs is called spurious melanosis. The blackening of the lungs in this case is much more deep and decided than we usually meet with from this cause, except occasionally in the lungs of a chimney sweep, stoker, collier, or other person constantly compelled by his occupation, to the inhalation of a very large proportion of solid carbon in the air he breathes, which was not the case with this patient.

True melanosis is a morbid secretion from the blood, deposited usually in the cellular tissue of different parts of the body, where it may be either diffused, or accumulated in masses, either solid, or liquid inclosed in cysts of condensed cellular tissue. The tumours at the root of the lung were evidently of this latter kind; and I think it not improbable that a similar deposit into the cellular tissue was the cause of the black colour of the lungs. Melanosis of the lungs may exist without any symptoms during life. Should the tumours enlarge so as to press upon surrounding parts, the symptoms will be such as from the pressure of any other enlargement; occasionally the tumours will ulcerate and may thus communicate with a bronchial tube, causing a sudden expectoration of black matter, which is very diagnostic. This seems to have been the case in the instance before us, as one of the bronchial ramifications was traced into a melanotic cyst, in which it terminated. The matter of melanosis is unorganized; and its chemical analysis shews a very large proportion of carbon. It was placed by Wardrop—who claims to have first noticed it,—amongst malignant diseases, but it presents none of the characters of malignancy; its mechanical pressure may derange the functions of adjacent parts, or may lead to ulceration. It seems reasonable to suppose that melanotic deposits depend upon an undue accumulation of carbon in the blood. There are two organs of the body, which constantly separate this element from the blood; the lungs discharge it into the air as carbonic acid; the liver pours out bile, a secretion containing a large proportion of carbon, into the intestines. Recent physiological and chemical observations lead to the belief that much of the biliary secretion is again absorbed with the food, but the carbonic acid of the lungs is all excreted. The most rational treatment, therefore, where we suspect the existence of melanosis, is to secure as healthy a condition as possible of the respiratory organs, and an efficient performance of their function, which may be further promoted by active exercise. Spirituous liquors should be forbidden, and those non-azotised principles, such as starch, sugar, and fat, which Liebig supposes serve chiefly for the supply of carbon for combustion, by the respiratory process, should be sparingly allowed, at the same time the functions of the liver, and of all secreting organs, should be maintained in as efficient a condition as possible.

The tubercular disease which we have seen in these lungs requires little comment. We frequently find such

appearances in the lungs of persons who have had no marked symptoms of consumption during life. Temporary derangements of the health, either general or local, have so far impaired the function of nutrition, as to lead to the deposit of that imperfectly organized substance which is the first form in which tubercle usually presents itself; but, there being no decided constitutional tendency, when the temporary cause is removed, the process of nutrition again assumes its normal character; and there may be some attempt at the removal, by absorption, of the unhealthy deposit which has been already formed. In these lungs we have seen three different morbid appearances, which are all of the nature of tubercle. There were grey miliary granulations, the form in which tubercular disease first appears; there were grey masses of induration, of a larger size, and more irregular form, consisting of the same cacoplastic lymph as the smaller granulations, and probably formed by the confluence of several of these into one mass, their dark colour being due to some melanotic intermixture, either of the true or spurious kind, which I have before described; and, lastly, in some of these larger masses, some absorption of the more organic constituent had been effected, leaving its earthy inorganic matter in a form resembling soft mortar. This partial absorption, together with the tendency to contract, which we always find in cacoplastic lymph, wherever deposited, causes the irregular puckering we have seen on the exterior of the lung, which may always be regarded as the mark of some tubercular disease existing within. The bronchial glands are very commonly the seat of tubercular disease, when this exists in the lungs; some of these glands, in this case, presented a similar appearance to that which I have last described in the lungs, only much blackened on the exterior by melanotic deposit.

The redness and thickening of the mucous membrane lining some of the bronchial tubes, are the ordinary marks of chronic bronchitis. There was some cough during the short time that this case was under my observation, and the report of her previous state represents the cough as having been severe, accompanied with much expectoration and oppressive dyspnoea. These are the usual symptoms of chronic bronchitis; but it is not improbable that the exacerbations of cough, dyspnoea, and expectoration, might be dependent upon temporary congestions of the lungs, producing the symptoms of what is called pituitous catarrh; or the attacks of dyspnoea may have been asthmatic.

The only other morbid appearance in the lungs which I have to notice, is that of the emphysematous vesicles seen upon the margins of the lower lobes. Probably a more careful examination of the tissue of the lungs, upon the surface of a section, after they had been suffered to dry in a state of full inflation, would have discovered that the air-cells were generally dilated, and perhaps their walls atrophied. The other morbid states which we have already observed in the lungs, are such as would strongly favour this emphysematous dilatation of the air-cells; the thickening of the lining of some of the bronchial tubes, and the condensation of part of the tissue of the lungs by tuberculous deposit,—

both must have had the effect of lessening the natural elasticity and permeability to air, of these organs, and thus the atmospheric pressure upon the cells of the healthy part during each expansion of the chest, must have been unduly great, so as, by its constant repetition, to cause that gradual but permanent dilatation of the cells which constitutes emphysema. This emphysematous state of the lungs would have the effect of increasing the dyspnoea arising from the other causes we have before considered.

The unusual dryness of the lungs which we have observed, must arise from a deficiency of the natural secretion of the bronchial tubes. I do not know how to explain this, unless it be that this secretion had been diminished, in common with others, owing to the failure of the proper amount of blood in the vessels, drained by the uterine hæmorrhage and serous discharges. When the blood is much reduced in quantity, the secretions which are formed from it must necessarily be deficient. It is true that the impoverished and watery condition of the blood which may be caused by excessive hæmorrhage, is not unfavourable to the effusion of serum into the cellular tissue, or from serous surfaces, constituting the various forms of dropsy; but then, in most cases, the absorbents, whose activity is increased by the removal of blood, rapidly absorb watery fluids from the stomach, so as to maintain the proper quantity of circulating fluid, though of a quality so dilute and attenuated, as shall readily again exude as dropsical effusions through the coats of the vessels. But, in this case, although the discharge continued, by which the volume of the blood was diminished, the supply from without, even of mere watery fluid, was almost cut off, the stomach having been scarcely capable of retaining any fluid for several days. I may notice, as perhaps being in favour of this explanation, that the œdema of the extremities which was observed when the case was first seen, had become diminished at the time of death.

The lesion in the valves of the heart is such as is very commonly found in elderly people; the enlargement of the heart was most probably consequent on this defect of its valves, which, either by obstructing the free current of the blood, or allowing some regurgitation, would throw an additional labour upon the organ, and thus cause its hypertrophy. These defects in the mechanism of the heart would give rise to murmurs accompanying its natural sounds, but they do not appear to have been in themselves sufficiently serious to be incompatible with a comfortable enjoyment of health.

The case is an interesting one, as presenting a considerable variety of morbid conditions. I have endeavoured, so far as I am able, to explain their true pathological nature, and to deduce likewise some suggestions for diagnosis and treatment, should similar cases present themselves in a less advanced stage; and this is the best use we can make of such cases as this, evidently far beyond the reach of cure when they first come before us.

CASE OF ACUTE LARYNGITIS, WITH OBSERVATIONS.

By GEORGE NORMAN, Esq., F.R.C.S., Senior Surgeon to the Bath United Hospital.

(Read at the Quarterly Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, September 28, 1848.)

A gentleman, aged 48, had common sore-throat, with swollen tonsils, for five or six days previous to the 22nd of August, from which he had in a great measure recovered, when on the afternoon of that day he was attacked with the symptoms of acute laryngitis, which rapidly increased, and in the night Dr. Everitt, of Devizes, was called in to see him, by Mr. Anstie, who had previously attended him. At that time he had difficulty of breathing, hoarseness, cough, a copious expectoration of viscid mucus, and pain and tenderness in the region of the larynx. There was but little heat of skin; the pulse 90, and of moderate force, but there was great depression of the general strength, and much restlessness. Tartar emetic was ordered at short intervals, till full vomiting was produced, and afterwards in sufficient quantities to keep up a state of nausea. He was seen early in the following morning (the 23rd,) by Dr. Everitt and Mr. Anstie. There was no relief of the symptoms, and there was more fever. He was bled at the arm till slight syncope took place, and twelve leeches were afterwards applied over the larynx, which bled freely. He was ordered calomel and tartar emetic every hour. At noon he expressed himself confidently as feeling better, and he appeared so in many respects, but the improvement was not such as was desirable in a case of so much danger, and as there did not appear much scope for further treatment, it was thought that the time was arrived to consider the question of tracheotomy, and with that view I was sent for. Dr. Everitt saw him between two and three in the afternoon, when he was much the same. There was no discolouration of the face, nor any decided symptoms of the near approach of a state of asphyxia; between four and five, however, he died somewhat suddenly, some time before I got to Devizes. The only alteration that preceded his death was, that of great increase of restlessness, so that he could not be kept in bed.

The throat, larynx, and trachea, were examined a few hours after death. There was great redness of the fauces, but little swelling of the tonsils; the epiglottis thickened and greatly enlarged, projected above the basis of the tongue, and looked like an extraneous substance occupying the whole space of the pharynx; its edges were thickened, everted, and puckered up, so as to form a narrow serpentine canal, terminating in the rima glottidis, the aperture of which was diminished to the smallest size by the thickened and inflamed state of the lining membrane of the larynx. The inner surface of the trachea was red, but less so than that of the larynx. Spread over its surface was a thin layer of lymph, which could be stripped off like a membrane. All appearance of inflammation in the inner surface of the trachea ceased abruptly about two

inches below the larynx. Further examination of the body was not admissible.

Cases of acute laryngitis in the adult are rare, but I believe are generally, if not always, fatal; they differ from the croup of infants, in the absence of the sonorous metallic respiration, and of any appearance of suffocation, and also in the suddenness of the death, without the previous laboured and frequent breathing which belongs to the last stage of croup, and to bronchitis,—the symptoms being those of general distress and restlessness; great depression; an occasional gasping effort of inspiration, but without hurried breathing; a constant desire to change the position, and a leaden sunken hue of the countenance, but not the swollen or dark-coloured appearance of the features, as in suffocation. Such has been the case in all the instances of the disease which I have seen.

One of these occurred in a gentleman of about fifty, whom I saw two years ago. He was seized suddenly with difficulty of swallowing at his dinner, and thought some portion of his food had lodged in the throat. Soon after he had a hoarse cough, with painful, rather than difficult, breathing. He was bled, and was to have had leeches applied in a few hours after, with calomel and opium every hour, but he was so much relieved before the time for applying the leeches arrived, that they were omitted, and he appeared so much recovered, that all alarm had ceased on his part and that of the persons about him, but in the evening of the following day the symptoms again returned. He had the same restlessness and gasping inspiration that marked the case now related, and he died suddenly, having been just before walking about the room. The *post-mortem* appearances were the same as in the case just related.

I think it probable, from the suddenness of death in these cases, without any previous laborious breathing, that death is occasioned by the impediment to the escape of carbonic acid from the lungs, from the contracted state of the larynx, that there comes a point when the blood is so deteriorated, that it is no longer compatible with life, and that death ensues as suddenly, as if the person, from accident, had inhaled carbonic acid gas, instead of atmospheric air.

A great practical question in such cases is the propriety of tracheotomy, and seeing the inefficacy of other remedial means, and the suddenness of the fatal termination, I am inclined to think it affords the most probable chance of saving the patient; but then it should be employed in the early stage of the disease,—that is to say, as soon as the true nature of the case can be made out with confidence. The inflammation being confined to the larynx, and suddenly terminating at the upper part of the trachea, as in both these cases it did, would go to show that an opening into the trachea would be effectual, if performed early, and it might be very safely. No one would hesitate to have recourse to this operation, if an extraneous substance had accidentally got into the larynx or trachea; and no ill consequences have arisen when it has been done, nor do wounds made into the trachea, in attempted

suicide, add much to the danger, or afford any great impediment to recovery. I am therefore disposed to agree with the opinion of Dr. Everitt, that the early employment of tracheotomy in a similar case, would not only be justifiable, but would afford the most probable means of averting the fatal termination. In Dr. Everitt's case the operation would have been somewhat difficult, for the neck was very short and thick, the trachea lying very deep, and the space for cutting down on it being very limited, but on a thinner subject with a long neck, the trachea lies sufficiently superficial to be very easily and safely opened.

PRACTICAL OBSERVATIONS ON CHOLERA.

By JOHN ALLAN, Esq., Surgeon, R.N., Epsom.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I trust that you will concur in opinion with me, that the following narrative of facts, relating to the successful treatment of cholera, well deserves a place in the *Provincial Journal*.

Having witnessed, with extreme pain, the ill success attending the treatment of this fell disease on its visit to England in 1832, I have been most anxious, since its threatened return, to gain practical information relating to it, from such of my professional friends as had enjoyed extensive opportunities of observing and treating it. Among these, Mr. Robert Stedman, of Great Bookham, Surrey, has kindly furnished a narrative of his experience, which is most interesting; since the treatment which he adopted, first in his own person, and afterwards in a large number of cases, was attended with unfailling, and, inasmuch as he did not lose a single patient, I may say, unequalled success. With Mr. Stedman's permission, I submit to the profession the substance of his narrative.

Mr. Stedman arrived off Calcutta in the early part of October, 1817, a few weeks after the cholera first broke out at Jessore. The ship, on board of which he was the appointed surgeon, was eleven days kedging up the Hoogly River, and, as each day's progress lessened the distance to the capital, so it increased the horrors of the spectacle presented by the numerous dead bodies floating, up and down, with the flux and reflux of the tides. Mr. Stedman was the first person in the ship who was attacked by the cholera, probably, as was strongly impressed on his mind at the time, because, as a professional man, he took more interest, than any other individual on board, in noticing the numbers, forms, colours, &c., of the dead bodies, and, particularly looking on, when any native was performing his duty, as police, in moving such of them as happened to get entangled, when the ship was at anchor, at the bows, by the cable, or otherwise. The Bengal papers of that period stated, that between two and three thousand dead were cast into the river in a week. Hence Mr. Stedman's exposure to a sufficient source of putrefying

animal effluvia to account for his being the first individual in the ship seized by the disease.

His plan of treatment was simple and bold, but most unequivocally successful, since he lost not one of the crew, amounting to forty-eight, all of whom, with only one single exception, had the disease, whilst other ships in the river lost many of their men. A Bristol ship, moored about two cable lengths higher up the stream, lost thirteen of her crew in the first fortnight after her arrival.

Mr. Stedman's sheet anchor and sole reliance was calomel. Having commenced dosing himself, and having repeated it to a successful issue, he followed the same plan in all the other cases as they occurred. He was, as it were, knocked down by the first seizure, and instantly rendered unable to go to the medicine chest. He requested the chief officer to go and weigh twenty grains of calomel for him. He replied that he would bring the calomel and the scales, but that he was not going to give such a dose as that. By the time he returned into the cabin, Mr. Stedman had incessant vomiting, but no power. He begged the officer to weigh twenty grains, and then to slip it off the scale upon his tongue. This done, the vomiting ceased for a short time, but not the cramps in the abdomen and limbs. On the recurrence of the retching, Mr. Stedman again, in less than ten minutes, requested to have twenty grains more. This checked all further vomiting, and, in one hour afterwards, still having spasmodic pains and drawings of the abdominal muscles, with heavings to vomit, he asked for twenty grains more. This, the first officer refused to have anything to do with, but the second officer and others standing around over-ruled the objection, and a third dose of twenty grains was given. Shortly after this Mr. Stedman was so far relieved as to be able to sit upright in the chair, and then they made him sip brandy and water. This warmed his stomach, and brought on re-action of the heart, and, although very feeble, with frequent cold sweats, for several days, he might be said to have been well next day, as he was able to walk about, and attend to his duty.

The second case occurred on the third day after Mr. Stedman's attack; and very rapidly all on board, with the single exception, already mentioned, of the chief officer, (who entirely escaped,) were seized. The captain, who had gone ashore, and remained there the whole time, also escaped.

To some of the men Mr. Stedman found it necessary to give to the extent of five doses, and, to one individual, six doses, of twenty grains each. In two instances he began with half-drachm doses. In all the cases this simple plan proved successful. The only adjuncts were brandy and water, and, as soon as the appetite could take it, solid food well spiced. What seems still more remarkable, when one considers the habits and mode of living of the natives, is, that the same treatment proved equally successful with them. The native boat, called "The Dingy," employed to convey messages, persons, &c., to and from the shore to the ship, frequently brought alongside, friends or relations of the boatmen, for the doctor's advice and medicines. To these

Mr. Stedman gave his never-failing powders. Some of them he saw no more of, nor could he ascertain that any one of them died. On the contrary, the boatmen continued to bring more patients, or begged for powders for those who were too ill to be brought to the ship. To show his thankfulness and gratitude for the benefits conferred on his friends, the boat-master brought to Mr. Stedman, as a present, a string of beads, such, as he said, were worn only by Brahmins of high caste.

In 1832, Mr. Stedman was settled in private practice at Seven Oaks, in Kent, and, in the few cases of the cholera which then came under his care, he employed the same remedy, with the same success in every case.

It might be feared that the administration of so much calomel might cause severe salivation, at least, if not otherwise damage the constitution, and leave the patients ruined in health, and unfit for their usual pursuits. These results, however, were not experienced in any of the cases. Mr. Stedman himself, and all the people in the ship, were, sooner or later, in no long time restored to the enjoyment of their usual health and strength. Not one was severely salivated nor disabled from pursuing his usual vocation.

I refrain from entering here into the question of the contagiousness of cholera, upon which Mr. Stedman has, upon good grounds, formed a decided opinion, in which I concur, that it certainly is the product of a specific poison. As, however, these observations may be in the hands of professional men in remote districts, where they may be required, on the spur of the moment, to prescribe for the disease, it must be a satisfaction for them to know one remedy to which they may resort with some confidence of a successful issue. A case, which occurred about a fortnight ago, in this place, may serve to show what may be effected.

A woman 44 years of age, of feeble constitution, and who, some six years ago had suffered a slight attack of paralysis, after feeling languid and ill for a day, was suddenly seized in the middle of the night, with violent vomiting and purging, with most severe pains and cramps of the bowels and lower limbs. About nine o'clock in the morning, her medical attendant having been called to her, found her with shrunk and leaden visage; hands, feet and face shrivelled and cold; vomiting and cramps incessant; the regular rice-water stools passing from the bowels in quantities; pulse at the wrist scarcely perceptible. As this occurred in my near neighbourhood, her medical attendant, knowing I took particular interest in the subject, kindly requested me to see the patient with him. We immediately sprinkled fifteen grains of calomel upon her tongue, and gave directions that a second dose to the same amount, should be given in case the vomiting should recur within an hour. We applied a strong embrocation, containing Liq. Ammon., Ol. Terebinth. and water, to the abdominal surface, and bottles of hot water to the feet, and ordered the limbs to be diligently rubbed till warmth returned. The second dose of calomel was given within the hour. After this the vomiting and purging ceased, reaction gradually returned, and the cramps became less and less frequent and severe. The patient partook of

brandy and gruel, as soon as she could receive it. Towards afternoon the next day, the bowels not having acted, a mixture containing small doses of Epsom salts and henbane was given. When the bowels acted, they yielded stools at first black like tar, and afterwards green and most offensive. The result was that the poor woman was restored to her usual health in the course of a few days. Her gums were affected by the mercury, but only in a moderate degree.

It will be observed that in Mr. Stedman's hands, calomel was the sole remedy. The patients were not stimulated by spices and cordials, nor nauseated by antimonials, nor stupefied by opiates. The objects aimed at were to tranquillize the stomach, and disgorge the liver. These two objects accomplished, brandy, diluted with water, was gratefully taken.

I wish not to be mistaken and represented as affirming that no other mode of treatment has ever been useful and successful in cholera. I venture simply to affirm that I have not yet heard of any method that has been attended with such unqualified and unfailing success.

I do not wish to add to the length of this communication by any disquisition on the pathology of cholera, but it is impossible to see a simple remedy act so effectually without one's thoughts being turned to its *modus agendi*. Calomel, when rapidly diffused over the mucous surfaces of the tongue, fauces, œsophagus, and stomach, appears to exert a soothing or sedative influence, at least, over the disposition to vomit. When it reaches the duodenum, it seems to act as a powerful emulgent of the liver. As soon as the bile begins to flow, the blood in the vena portæ, previously stagnant, is set in motion towards the liver, followed, of course, by that in the mesenteric veins. The purging is thus arrested, apparently by the power of the calomel; for there would appear to be this essential distinction between cholera, and diarrhœa, or the ordinary purging produced by medicines, that, in these latter, the fluids evacuated are poured out by the exhalant arteries opening into the bowels, being a natural function unduly increased; whereas, the rice-water dejections characteristic of cholera, are, in fact, the liquid portion of the blood squeezed in a retrograde course out of the valveless mesenteric veins, through the open mouths of their minute extremities into the intestines, it being their healthy function to imbibe and absorb, instead of exhale fluids.

The free secretion and flow of bile being established by the peculiar action of the calomel, the blood in the abdominal veins resumes its healthy course towards the liver; the heart and lungs, both by nervous sympathy, and by the mechanical impulse thus given to the almost stagnant blood, participate in the relief, and thus healthy reaction is speedily established throughout the system.

JOHN ALLAN.

Epsom, December 18, 1848.

CASE OF INTESTINAL CONCRETION.

By SAMUEL S. DYER, Esq., Surgeon, Ringwood.

George Wills, aged 14 years, October 11th, 1848. Ever since birth he has, more or less, suffered from irregularity of the bowels, the excretions generally consisting of small and hardened scybala. At five years of age he had a more than usually severe aggravation of symptoms, nothing passing his bowels for a fortnight. At this time an artificial anus was proposed by the surgeon in attendance, but objected to by the parents. They have been constantly in the habit of giving him enemata of soap and water, or gruel.

He is now suffering great pain, recurring with greater severity at intervals of a few minutes; nausea, but no vomiting; the abdomen tympanitic, and enormously distended, measuring 39 inches round on a level with the umbilicus. The cavity of the thorax is diminished by upward pressure of the diaphragm, producing dyspnœa. There has been no relief from the bowels for the last three days. No tumour of any kind in either groin; unusual resonance on percussion in each lumbar region. On examination per rectum, I could distinguish, high up, some hardened fæces, and by this means removed as much as I could reach.

Small doses of Sp. Terebinth, with Tinct. Opii, were given to relieve pain and flatulence; and fomentations, and injections of warm water, which, however, returned without any fæculent matter. The long tube of O'Beirne could not be passed higher than five or six inches.

Oct. 12th and 13th. Symptoms continuing; still unable to reach or remove any fæces. Vomiting, hiccup, increasing pain; and early on the morning of the 14th, he died.

Post-mortem 28 hours after death.—Parietes of abdomen very much attenuated; signs of former and recent peritonitis; no enlargement of mesenteric glands. The entire intestinal canal greatly distended with flatus, one convolution alone, ascending, crossing and descending, as large as a man's thigh being all that appeared on turning back the parietes. In the sigmoid flexure of the colon and upper part of the rectum, was an enormous mass as hard as bone; this being removed from its position, and its enveloping intestine opened, appeared a mass of concreted or hardened fæces, measuring four inches long, and nine round, of greenish-brown colour, velvety feel, and covered with thick mucus.

As I know from two years personal experience that this boy had been as large as a woman in the last month of utero-gestation, it is not unreasonable to suppose that such a concretion had existed here, forming an obstruction from that time at least, if not from the date of the illness, nine years since. The pathological and practical questions which are suggested by this interesting case are, first,—What was this concretion? Was it formed of the husks or beards of some grain interwoven and matted together, as detected and explained by Dr. Wollaston and Mr. Clift? Or was it that the fluid part of the fæces had always of late years been absorbed? Its appearance very closely resembled the description of the former as given by Dr. Watson in his lectures, and I should have inclined to the opinion

of this being the true nature of the concretion had not the mother assured me the child had never eaten any oatmeal or barley meal, &c. Next, did the small quantity of alvine discharge come from the lower end of this mass separating, a fresh supply always accumulating above, or could it have remained in the same condition throughout, all excretions passing between it and the bowels?

Presuming no cathartics should be administered, under the almost certain belief that a mechanical obstacle was the cause of obstruction, should more violent means have been made per rectum, for its removal, or should we be justified in exploring the sigmoid flexure with scoops, and such like, or in making an artificial anus, as once proposed in this very case, had the parents consented, with (in addition to the filthy nuisance of such a supernumerary aperture,) the possibility of the recurrence of such symptoms?

MEMOIR ON TURNING,

AS AN ALTERNATIVE FOR CRANIOTOMY AND THE LONG FORCEPS, IN DEFORMITY OF THE BRIM OF THE PELVIS, &c. &c.*

By J. Y. SIMPSON, M.D.,

Professor of Midwifery in the University of Edinburgh.

SECTION IX.—ON THE COMPARATIVE DANGER OF LOCAL LESIONS OF THE MATERNAL ORGANS (VAGINA AND UTERUS,) IN DELIVERY BY TURNING, AND DELIVERY BY INSTRUMENTS.

As far as the observations in the preceding section go, they refer to the comparative degree of actual danger to the *life* of the mother under the opposite means of treatment, by which cases of labour, with arrestment of the head, and distortion of the pelvic brim, may be treated. They refer merely to the question of the probable death or probable survival of the mother, under the two different lines of practice spoken of,—viz., delivery by instruments, and delivery by turning. But it is possible, that, under such a form of labour as we have been considering, the mother may survive, that she may escape with life, and yet the maternal passages and neighbouring soft parts may be so much damaged and injured, as to interfere, in a more or less dangerous or distressing manner, with the state of her future health and future happiness. The cervix uteri, or the walls of the vagina, are sometimes so contused, or become so inflamed, that gangrene and sloughing supervenes, and lead on to the formation of cicatrices and strictures; or, what is still more deplorable, this resulting gangrenous inflammation may produce fistulous communications between the vaginal canal, and the rectum, or urethra, or bladder. No consequence could be possibly more deplorable than this last,—the occurrence of recto-vaginal or vesico-vaginal fistulæ.

* Continued from page 541 of last volume.

Speaking of sloughing of the urethra or neck of the bladder, as a consequence of severe labour, Dr. Collins remarks, in words dictated by the best possible feelings: "I do not know of any occurrence more calculated to reader the patient's life one of endless sorrow; or, at the same time, more likely to cause the practitioner such lasting regret. When it unfortunately happens (as in some instances is unavoidable,) in consequence of the protracted length to which we are at times compelled to permit the labour to proceed, owing to great difficulty in the passage of the head, the child being *alive*, here the medical attendant's mind cannot, on his *own* account, feel distressed, as the *only* means he could adopt to guard against the danger would be to lessen the head, which, in my opinion, no consideration should induce him to do under such circumstances."*

Are such distressing results as Dr. Collins here describes more liable to occur under the present practices of delivery by instruments, or under the new practice which I propose of delivery by turning? In other terms the question which I wish to consider is this:—

Are Local Lesions from Inflammation of the Vagina, such as Sloughing, Fistulæ, &c., more liable, in a Contracted Pelvis, to supervene after Delivery by Turning, or Delivery by Instruments?

Vaginal inflammation terminating in sloughing, cicatrices, and fistulæ, is not unfrequently observed after protracted labours that are terminated by the forceps or crotchet. In his "Clinical Midwifery," after detailing "the histories of fifty-five cases of difficult parturition in which the forceps was employed," Dr. Lee remarks, (p. 32,) "Five of the mothers whose cases have now been related died from puerperal convulsions, and four from the rash and inconsiderate use of the forceps; seven had the perineum more or less injured; one the recto-vaginal septum torn; five were left with cicatrices of the vagina after sloughing; and one with an incurable vesico-vaginal fistula." After describing the histories of sixty-five cases of "difficult labours from distortion of the pelvis, swelling of the soft parts, convulsions, hydrocephalus in the fœtus," and other causes in which delivery was effected by the operation of craniotomy," Dr. Lee again observes (p. 59,) "In thirty-eight of the cases in this report, the labour continued from forty to seventy hours. In the cases of spontaneous rupture of the uterus and convulsions only was the delivery effected before the labour had lasted upwards of thirty hours. In a very large proportion of the cases, the difficulty arose from distortion, or a contracted state of the pelvis. Rupture of the uterus took place in three before perforation, and the inflammation and sloughing of the uterus, vagina, and bladder, which proved fatal to eight others,

were chiefly or solely produced by the long-continued violent pressure on the soft parts by the head of the child before it was opened and extracted. In those who recovered with vesico-vaginal fistulæ, or contraction of the vagina from cicatrices, the unfortunate occurrences arose from craniotomy being too long delayed."

In the table which I have previously given from the same author (see Table IX.) of the results of 87 cases of craniotomy, local lesions on the part of the mother are noted as having occurred in several instances. Out of the 87 cases, eight,* or about 1 in every 10, suffered from vaginal inflammation and sloughing; four,† or nearly 1 in every 20, were left with vaginal fistulæ.

On the other hand, I am not aware of a single recorded instance in which vaginal sloughing and fistula ever followed transverse presentations of the fœtus, and where the delivery is, as a general rule, always accomplished by turning. Two circumstances lead to this immunity:—

1st. In presentations of the arm and shoulder the presenting part does not so completely fill up and compress the tissue of the brim as in head-presentations. Hence both the tendency to, and the occurrence of, congestion of the vessels and inflammation in the tissues, situated below the site of the compression,—viz., the vagina, &c., is far rarer. But,—

2ndly. The delivery is always, or almost always, accomplished early in the labour, and no doubt the mere length and protraction of the labour is one of the great, if not the greatest, predisposing and exciting causes of gangrenous inflammation and sloughing of the vagina.

In many cases vaginal sloughings and fistulæ have been attributed to the use of instruments, when they were more truly owing to gangrenous inflammation and sloughing, ensuing in consequence of the delay that was allowed to occur before instrumental delivery was adopted. In the history of most instances of vesico-vaginal and recto-vaginal fistulæ following labour, there is one simple fact, proving that they are not the direct effect, as is too often supposed, of lesions and lacerations by the forceps or crotchet. If vesico-vaginal fistulæ were, in this way, the direct effect of injuries produced by cutting with the instruments, then escape of urine through the vagina would be observed immediately after labour. But this is rarely the case; the general fact being, that the escape of urine through the false opening between the urinary and vaginal canals, is not seen for several days after delivery; because it is not till several days have elapsed that the gangrenous slough in the parietes of these canals separates. No soft parts, any more than the maternal canals, could stand, without endangering their vitality, the steady pressure upon them for twenty or thirty hours of a firm body, such as that which the

* Practical Treatise, p. 359.

* See Cases x., xx., xxx., xxxii., lvii., lviii., lxi., lxxiv.

† See Cases i., lii., liii., lxiv.

detained foetal head exerts in contracted pelves upon the two points of contraction,—the symphysis pubis before, and the promontory of the sacrum behind. It is not a matter of wonder that the soft structures compressed at these special points between the foetal head and maternal bones, should sometimes inflame and slough. It is, perhaps, surprising rather, that this consequence does not follow oftener. On this point Dr. Beatty, of Dublin, makes one or two remarks of such importance, that I will offer no apology for quoting them at length. "With respect (says he,) to laceration and sloughing of the vagina, bladder, &c., stated by some authors to be caused by the forceps, and used as an argument against their employment, I am of opinion that in the majority of cases, when these lamentable results occur, the blame is unmerited; because I have seen the worst inflammation and sloughings of these parts follow in cases where the perforator had been used, and even in some where no instrument whatever was employed. The truth is, the mischief is effected by the pressure of the infant's head upon the soft parts of the mother, and after this has been continued with sufficient intensity, for a sufficient length of time, the inflammation caused thereby will run its course, no matter in what way delivery is accomplished, whether by the natural efforts or by instruments. But it frequently happens that delivery is effected in these cases by instruments, *too late* to prevent the unhappy results alluded to, and then the operation is charged with the consequences. If an accurate account of the subsequent condition of all women after delivery could be obtained, I much fear that the histories of those cases in which labour had been allowed to run too long before interference was used, would be anything but satisfactory. The lamentable sloughings of the vagina, with subsequent closure of the passage by the process of cicatrization, or the still more distressing sloughing of the bladder, with its attendant urinary fistulæ, are seldom mentioned in lying-in hospital reports, because the patients are usually removed from those institutions *before* such results have become very apparent; and thus, a case left to nature, in which delivery is effected by the natural efforts, is set down as a favourable one, without any notice of its consequences."*

Dr. Beatty elsewhere soundly and correctly remarks in regard to the causation of gangrene and sloughing, &c., of parts of the vaginal walls by the pressure of the child's head, "that it is the *continuance* of the pressure that does the mischief rather than its *intensity*. We know that the soft tissues of the body are endowed with a resiliency—a power of resistance that enables them to bear a temporary compression of great amount without injury, while inferior pressure continued for a length of time will terminate in their disorganization. The malingering soldier is well aware of this fact, and acts upon it when he wishes to produce an ulcer. He

straps a piece of coin or other hard substance tightly upon the part. At first no effect is produced, and if the apparatus is removed in a short time, there is no evil consequence; but if the same amount of pressure is continued for some hours, such a degree of injury is inflicted as terminates in the destruction of the part, and a sloughing ulcer is the result."*

That the mere morbid protraction of labour is the great predisposing cause of gangrenous inflammation and sloughing of the vagina (as suggested in these remarks,) is shewn by Dr. Collins' results. Dr. Collins has recorded the duration of the labour in six cases where sloughing of the vagina was detected after death. The following table shews that the accident occurred in an immensely greater proportion in prolonged than in short labours; and that, consequently, protraction is, as I have just stated, almost a necessary antecedent to the occurrence. The case, I may remark, in which sloughing followed a labour less than twenty-four hours in duration required instrumental delivery, but the mode of delivery, whether by the crotchet or forceps, is not specialized by Dr. Collins. (See Practical Treatise, p. 358.)

TABLE XIV.

Duration of Labour in six Fatal Cases of Sloughing of the Vagina.

<i>Length of Labour.</i>	<i>Number of Deliveries.</i>	<i>Number of Cases.</i>	<i>Proportion of Cases.</i>
Within 24 hours	15,586	1	1 in 15,586
Beyond 24 hours	264	5	1 in 53

If, as these data shew, the protraction of labour is a main and almost necessary element in the production of gangrenous inflammation of the vagina, it is equally evident that turning, in the class of cases we are considering, while it frees the mother from the danger of a fatal termination, (as shewn in the last section,) would at the same time free her also from the chance of suffering from these *local* complications that are apt to follow upon protracted labours.

In the passage which I have quoted from Dr. Collins, at the commencement of the present section, that experienced practitioner laments our being occasionally compelled to subject our patients to the chance of local dangers and complications, in consequence of our being compelled, in some unavoidable instances, to allow the labour to proceed onward to a protracted degree, from the child being still alive, "for then the *only* means the practitioner could adopt to guard against the danger would," says Dr. Collins, "be to lessen the head, which, in my opinion, no consideration should induce him to do, under such circumstances," viz., as long as the infant is still living. The proposition which I have made of turning in such instances resolves the difficulties attending upon them in two

* Dublin Journal of Medical Science, Vol. xii., p. 290.

* Dublin Quarterly Journal, Vol. xxi., p. 344.

ways. For, *first*, it enables us to deliver the patient early and at once, and thus frees us from the dread of these consequences of protraction; and, *secondly*, the continued vitality of the infant would, under the treatment by turning, not be a reason and incentive for our dangerously delaying the delivery, but would form a strong reason and incentive for our proceeding with the practice at as early a period as was proper and possible. The details of a case or two may enforce these observations; and I shall select some from Dr. Collins, calculated both to illustrate these remarks, and to shew, that in protracted labours, occasionally *before* the time that the child does at last die, the dreaded amount of local mischief has been accomplished, so that if we waited always for the certainty of the infant's death, in order to deliver by craniotomy, we should wait beyond the time that was necessary, in order to save (locally,) the maternal structures from inflammation and gangrene.

It will be remarked, that in the first of the following instances, the foetal heart was heard six hours, and in the second case, eight hours, before delivery, and consequently ceased some time between these periods and the period at which the perforator was used—in short, necessarily not long before craniotomy was practised. Consequently we have here cases which, in the severity of their local, and, I may add, in the severity also of their general symptoms, shew what I have before argued, that the mother may herself be assuredly placed in the greatest possible danger and hazard from the protraction of the labour, before that protraction kills the child. I may add that, in the first case, the position of the foetal heart,—viz., in the right iliac region, shewed the infant to be in the occipito-posterior position, (the third position of Nägele.)

CASE XXXVI.—“No. 126. This woman was fifty-nine hours in labour; it was her first child. The pains were for a considerable time very trifling, with long intervals; however, for the last twenty-four hours the uterus acted with tolerable regularity, the pains being at times strong, causing the head to press with much force against the ischia, where it remained stationary for the greater part of that time. Her pulse was very much increased in frequency, varying between 120 and 130; the external parts were œdematous. As the foetal heart had ceased to act, having been distinctly audible in the right iliac region six hours before, the head was lessened, and the crotchet applied. The placenta was expelled in forty-five minutes, immediately after which, in consequence of hæmorrhage, the hand was introduced, and so it was arrested. Violent inflammation and sloughing set in, resisting all treatment, and she died on the 9th day. For four days previous she had severe diarrhœa, a succession of motions coming on suddenly, with severe pain; she had also severe hiccough. On examination after death, the vagina was found in a state of slough; the sides opposite the spines of the ischia were broken through with the slightest force, and were completely gangrenous. A circular opening the size of a shilling was found, forming a communication between this cavity and the rectum, the mucous

surface of which, as also that of the colon, was softened, and had, in the vicinity of the opening, a gangrenous appearance. There was no symptom of inflammation in the peritoneum or uterus.”*

CASE XXXVII.—“No. 1091. Was admitted August 23rd, in labour of her first child, and was not delivered until the 25th, being a period of fifty-six hours. Uterine action from the commencement until within six hours of the expulsion of the child, was extremely feeble, with long intervals. The head remained high in the pelvis, and although the ear could not be reached, it was evident the head had sufficient room to pass; to effect which, uterine action was alone wanting. As soon as the pains began to be brisk the labour proceeded without difficulty. The foetal heart was quite audible until eight hours previous to the birth. In three hours after the hand was passed to remove the placenta, it was found separated, and without the slightest effort the uterus contracted and expelled both. The perineum had suffered considerably in the passage of the head. The patient never seemed to rally after delivery; the pulse continued quick; there was considerable tenderness on pressure over the uterus, with a foul discharge from the vagina. * * * On the 7th and 8th she had distinct rigors, followed by perspiration, after which her strength became greatly reduced. The vaginal discharges continued foul, notwithstanding the most rigid attention to cleanliness and the use of stimulating injections. She gradually sank and died on the 11th day, having for two days previous suffered from frequent hiccough. On dissection, the only morbid appearances found, were in the bladder and vagina. In the bladder, the mucous surface was covered with yellow lymph, and it contained a quantity of muco-purulent fluid. In the vagina, opposite the right ischium, a portion appeared to have been destroyed by slough.”†

Hitherto, under the present section, I have spoken of the dangers which the mother may avoid by employing the operation of turning as a substitute for instrumental delivery, in cases of contraction of the pelvic brim. But while turning enables us, as I have shown, to eschew some of the gravest and most imminent dangers connected with the use of the long forceps and crotchet, it is on the other hand, by no means to be forgotten, that it subjects the mother to one great form of danger, from which, in common belief, she would be comparatively free under the adoption of instrumental delivery. The special maternal danger attending upon turning is *laceration or rupture of the uterus*, confessedly the most fatal complication that can occur in connection with delivery. Is the liability to rupture under turning so great as to make us avoid this practice and trust rather to the forceps and crotchet? Or, in other words,—

Is Rupture of the Uterus in Contracted Pelvis, much more apt to be produced by Delivery by Turning than by Delivery with Instruments?

Most authors describe laceration of the uterus as

* Practical Treatise, p. 158.

† Practical Treatise, p. 483.

one of the principal hazards which the mother runs in cases of turning. But injury and laceration of the uterus are perhaps not so liable to follow this operation as is generally imagined. "Between the years 1823 and 1834, (says Dr. Ramsbotham,) I delivered more than one hundred and twenty women under transverse presentations; independently of a few cases to which I was summoned where spontaneous evolution occurred. Many of these cases presented a formidable appearance; for in one the membranes had been ruptured a whole week; in another, sixty-nine hours; in a third, fifty-eight hours; in another fifty-five; in another, fifty-three; and in many, more than forty-eight; and as a general principle, we presume that the longer the liquor amnii has been evacuated, the more likely is the uterus to have embraced the foetal body firmly, and the more difficulty will there be in overcoming the resistance. In none of these cases did I exhibit large doses of opium, and in those few where bleeding was practised, that operation was had recourse to, not for the purpose of relaxing the uterine fibres, but to relieve the inflammation which the soft structures were suffering, and to remove tumefaction. *In not one of these instances was any injury inflicted on the uterine structure; nor did any permanent evil arise that could be attributed to the operation.* In four cases only was the uterus so powerfully contracted as to refuse admittance to the hand, and compel me to adopt the alternative of exviscerating or decapitating the fœtus."*

Besides, that injury of the uterus is thus not so apt, as is perhaps generally imagined, to follow upon turning when carefully and cautiously performed, there are other considerations, which are calculated strongly to shew that the danger of laceration in the cases of pelvic contraction, most fitted for the practice we suggest, is not much, if at all, increased by the proposed operation. I shall state the considerations to which I shall refer.

In the *first* place, I would premise this important remark, that (according to all our best obstetric pathologists,) those degrees and forms of morbid contraction of the brim of the pelvis which I deem to be the cases best adapted for delivery by turning, are exactly those cases on which, under any plan of management, (whether the patient be delivered by the natural efforts, or by the forceps or crotchet,) rupture and laceration are exceedingly apt to take place. On this subject I am anxious to adduce full evidence, and will consequently appeal to the unprejudiced testimony of Ramsbotham, Denman, Churchill, &c.

"Laceration of the uterus (says Dr. Ramsbotham,) is most likely to happen to a patient who has had three or four children, who possesses a slightly distorted pelvis, and who has been in strong labour for a number of hours. Although (he further observes,) the same rent may take place in any portion of the organ,

its most frequent seat is at the neck, either at the posterior part opposite the prominence of the sacrum, or anteriorly, behind the symphysis pubis. The direction is also mostly transverse, or slightly oblique. It is not difficult to account for this being the most usual situation of the injury; for since, during the latter part of gestation, the neck of the womb rests upon the pelvic brim, if the promontory of the sacrum dip too far forward, or the ridge of the pubes be preternaturally sharp, it is reasonable to suppose that the uterine structure may be affected, that inflammation may occur as a consequence of pressure, and that a thinning or softening of the substance may be induced, and, under these circumstances, should the structure give way at all, it is likely that the weakened part will be the first to suffer. Denman, indeed, says that, independently of disease, the uterus may be *worn through* mechanically, in *long* and *severe* labours, by pressure and *attrition* between the head of the child and the projecting bones of a distorted pelvis, especially if they be drawn into points, or a sharp edge. One or other of these causes may explain (Dr. Ramsbotham concludes,) why we more frequently meet with laceration of the uterus, when the pelvis is *slightly* contracted in the conjugate diameter of the brim, than when the distortion is *excessive*."* And he adds one case. "In one of the last cases" says he "of ruptured uterus to which I was called, dissection shewed that the linea ileo-pectinea, where it traverses the pubes, was formed into a very sharp ridge, that there were a number of bony prominences jutting from the inner surface of the pubic bones towards the cavity, and one, especially, situated above the left thyroid foramen, which was so pointed as to pain the finger when hard pressure was made on it. The sacro-pubic diameter was two inches and three quarters in extent. It was the woman's second pregnancy; the first child had been delivered by craniotomy. After a consultation held, labour on this occasion was induced in the eighth month by the exhibition of four doses of the ergot. The membranes broke spontaneously three hours and a half before the accident occurred. I was sent for by the gentleman in attendance, immediately, and delivered by turning; she died on the night of the fourth day."†

Dr. Churchill expresses similar views in regard to contraction of the pelvis as a cause of rupture. "A certain amount," says he, "of narrowing of the upper outlet, may give rise to it. This is a purely mechanical cause. The head of the child is forced down by violent labour-pains, but is unable to enter the pelvis, from the contraction of the upper strait. Now, if the pains continue with great power, the head is turned to one side or the other, or posteriorly, and the only obstacle here being the uterine or

* Obstetric Medicine and Surgery, p. 469.

† Principles of Obstetric Medicine and Surgery, p. 469.

vaginal parietes, the head is drawn through them at the weakest part. They offer the less resistance, probably from the woman having borne several children.*

Other authorities might be adduced to the same effect,—viz., that rupture of the uterus is especially liable to happen under protracted labour or instrumental delivery, when the brim of the pelvis is slightly contracted,—that is, in exactly the class of cases most likely to be adapted for delivery by turning.†

In the second place let me observe that, while contraction of the pelvic brim is thus acknowledged to be a strong predisposing and exciting cause of rupture, it must, at the same time, be held in view as a most important correlative fact, that it seldom does lead to laceration of the uterus, unless the effects of its mischievous agency are allowed to be combined with, and increased by, a morbid degree of prolongation and protraction of the labour itself. Dr. Denman's observation is, doubtlessly, so far, quite true, as to the possibility that the "uterus may be worn through mechanically, in long and severe labours, by pressure and attrition between the head of the child and the projecting bones of a distorted pelvis, especially if they be drawn into points, or a sharp edge."‡ In fact the liability to rupture, like the liability to most other obstetric complications, increases progressively with the increased duration of the labour, as the following table, calculated from Dr. Collins' returns,§ sufficiently attests:—

TABLE XV.

Duration of Labour in 24 Cases of Rupture of the Uterus.

<i>Length of Labour.</i>	<i>Number of Deliveries.</i>	<i>Number of Cases of Rupture.</i>	<i>Proportion of Cases of Rupture.</i>
Within 6 hours	13,412	7	1 in 1,916
From 7 to 24 hours	2,174	10	1 in 217
Above 24 hours	264	7	1 in 38

The principle inculcated by the evidence of this table is so important in its bearing upon the practice suggested in the present memoir, that I shall take an opportunity of enforcing it by adducing three instances of distorted pelvis, in which laceration of the uterus took place after the labour had been allowed to become

protracted; and that, though the mode of ultimate delivery in each of the three was different,—in the first being effected spontaneously, in the second by instruments, and in the third by turning.

CASE XXXVIII.—"No. 22. On the fifth day after delivery, without any apparent cause, was seized with violent hæmorrhage. When we saw her, which was immediately after, no pulse could be felt, and, though most prompt and active measures were employed, she died in less than an hour. She had been delivered, by the natural efforts, of a living child, after a labour, not very severe, of forty-eight hours; nor from that time was there distress of any kind perceptible.

On dissection, the abdominal viscera appeared healthy, as did the uterus, at first sight, but on raising it out of the pelvis, about the size of a shilling of its muscular substance, corresponding to the projection of the sacrum, was found to have given way, the peritoneal covering remaining uninjured. There were two spots in the vagina approaching to a state of slough."||

CASE XXXIX.—"No. 28. The labour pains in this case were feeble, yet the child continued to advance. The heart's action was audible with the aid of the stethoscope, the mother's pulse natural, and no unpleasant symptom. Suddenly, however, the most alarming debility came on, the pulse being scarcely perceptible, accompanied with vomiting and much pain on pressure over the uterine region. Immediate delivery was necessary, and the perforator was used. She was a feeble delicate woman, was thirty-six hours in labour previous to the setting in of the above symptoms, and had been force-delivered eleven months ago. She died in fourteen hours.

"On dissection, an opening was found at the junction of the uterus with the vagina, (exactly opposite a projection of the last lumbar vertebra,) not larger than to admit the passage of one finger. The muscular substance of the uterus, anteriorly, had also given way to a considerable extent, the peritoneum being whole. The pelvis scarcely measured three and a half inches from pubes to sacrum."¶

CASE XL.—"A patient with her spine somewhat curved, and who, in her first confinement, had borne a dead infant, after several days suffering, was taken in labour of her second child, early on the 16th November, 1846. The pains had been constant and strong for about thirty hours, when I saw her, with Dr. Gordon, who had been called in, and the head had remained stationary and fixed at the same point of the brim for the last twenty-four hours. On examination, Dr. Gordon and I found the pelvis small, the os uteri

noted as existing in sixty cases. Drs. McClintock and Hardy, in their excellent work on "Midwifery," observe, in regard to the pathology of rupture, (p. 295,) that the accident is more likely to be produced "where the deformity of the pelvis is slight, than where it is excessive,"—that is, in precisely those cases best fitted for turning.

‡ Ramsbotham's Principles of Obstetric Medicine and Surgery, p. 469.

§ Dr. Collins met with 34 cases of rupture during his Mastership. In 24 out of the 34 he has given the duration of the labours in a table in his "Treatise," p. 307.

|| Dr. Collins' Practical Treatise, p. 287.

¶ Dr. Collins' Practical Treatise, p. 300.

* Theory and Practice of Midwifery, p. 408.

† See, for example, Dr. Robertson, (Edinburgh Med. and Surg. Journal, Vol. xlii., p. 61.) "In a great majority of instances (says he,) of slight contraction of the inlet, in perhaps three cases out of four, the diminution of space is caused by the promontory of the sacrum encroaching upon the antero-posterior diameter. On this ground, perhaps, we may explain why, in a somewhat greater number of cases of laceration, the rent is found in the posterior, rather than the anterior, part of the uterus."

‡ Out of 300 cases of rupture of the uterus, reported by Dr. Trask, ("Monthly Journal and Retrospect" for August, p. 178,) contraction of the brim of the pelvis was found

fully dilated, and the head of the infant imperfectly entered into the brim, and apparently uninfluenced in its descent by the powerful uterine contractions that were present. The sutures of the foetal head were strongly overlapping, and a triangular portion of the foetal cranium terminating in the posterior fontanelle was driven deeply in and below the level of the two other portions of bone that went to the formation of that fontanelle. On first touching the head I thought this indented bone was, as usual, the occipital, but a more careful examination showed me that it was the left parietal bone, and that the head presented its right side, instead of the vertex. The head, though thus greatly compressed transversely, still filled very imperfectly the pelvic brim, and the right side of the pelvis was so unoccupied as to allow a long loop of the umbilical cord to prolapse. The vessels of the cord were beating, shewing the child to be still living. The local and constitutional symptoms under which the patient was suffering shewed the necessity of immediate interference and delivery; but how was the delivery to be accomplished? The mass of the head was too high above the brim to allow of the successful use of the long forceps, even if there were space sufficient (which was very doubtful,) in the contracted pelvis to allow of the head passing in this form. The perforation and breaking up of the head by craniotomy would allow of delivery, but the cord showed the child to be alive, and I had doubts here, as in other cases, of the propriety of murdering the infant, when delivery by other means was possible; the other remaining means consisted in its extraction by turning, and, with Dr. Gordon's consent, I proceeded to deliver the patient by this operation; it was accomplished without much difficulty. The child was still-born, but was recovered by the usual means of resuscitation; it survived, however, only a few hours. That part of the scalp covering the parietal bone, which had infringed so long on the promontory of the sacrum, remained depressed, and pitted like an umbilical mark; the left parietal bone itself remained also deeply displaced, and indented below the corresponding edges of the occipital and right parietal, and on dissection some blood was found effused beneath it. The mother continued well for a few hours, but then began to sink with symptoms of abdominal effusion and rupture. She died on the following day. On dissection, the neck and lower part of the body of the uterus were found lacerated, and at one part the oblique and valvular-like laceration extended through the peritoneum. The pelvic brim was obliquely ovate in form, the right side being much larger than the left, but the conjugate diameter of the brim was very narrow. At its most contracted point a piece of wood wedged in between the promontory of the sacrum and the nearest point of the pubis, measured only two inches and seven-eighths. The pelvic joints felt loose and mobile.

The observations which I have adduced in the preceding pages seem then to point to the following deductions:—

First. Morbid contraction of the pelvic brim is whatever mode of delivery is adopted, liable to be a cause of rupture of the uterus.

Secondly. This morbid contraction principally and

almost only becomes a cause of rupture, when in conjunction with it, the labour, as in the three cases just now detailed, has been allowed to become long and protracted in its duration, and the compressed tissues of the cervix are consequently rendered preternaturally friable and lacerable. Then,

Thirdly. It necessarily follows, that this complication would in all probability be avoided, (when morbid contraction of the pelvis exists,) provided either nature or art was enabled to deliver the patient early, and did not permit of the tissues of the lower part of the uterus becoming wedged in, contused, inflamed and softened, between the presenting head of the infant and the opposing points of contraction in the pelvic brim. Hence a power of artificially terminating labours with this complication as soon after their commencement as the dilatation or dilatability of the passages would allow, would be, so far, a means of averting this fearful accident under these circumstances. In the delivery by the operation of turning, we possess such a power; and by the exercise of it in these cases we may, I believe, not only sometimes save the mother from danger, but the child also from death. And I have already shewn at sufficient length, that the degree of force required to extract the head, will depress and groove the cranial bones of the child without necessarily injuring or tearing the soft pelvic tissues of the mother; provided always these tissues have not been previously brought into a state of congestive and inflammatory friability by the previous duration of the labour, and by the impaction of the head having been allowed to be prolonged to an excessive and morbid degree. All the evidence which I have adduced in different parts of the present memoir, goes to shew this fact,—that the danger attendant upon turning and other modes of operative delivery is, as a general law, regulated less by the mere performance of the operation, than by the mere degree of protraction allowed to elapse before operative interference is adopted. And, in addition, the evidence which was brought forward in the last section appears to entitle us to deduce as a supplement or corollary to this important general law, that, (supposing the maternal passages are once dilated or dilatable,) when operative delivery by the forceps, or crotchet, or turning, is accomplished with *comparative force*, it is safer, *cæteris paribus*, to the mother when performed early, than the same or other modes of operative delivery would be if accomplished with *comparative facility*, but performed late;—that, in other words, force is less dangerous than protraction;—that the hazards of operative delivery are more regulated by the time of its adoption than by the difficulties of its accomplishment.

Fourthly. It must still be held constantly and prominently in view that, in the proposed practice of turning, the great maternal danger which the practitioner has to avoid, is injury and laceration of the uterus, and he

must use all due care and caution to avert any chance of this accident. The preceding observations shew some of the leading points and objects which he should attend to, in order to avoid it. These points are, principally,—1, the early performance of the operation; 2, when possible, (as in Case I.) it should be effected even before the membranes rupture, as turning is greatly more easy and more safe before than after the evacuation of the liquor amnii; 3, if the liquor amnii has escaped, and the uterus has contracted, the uterine fibres should be previously and perfectly relaxed by the use of opium or chloroform; and, 4, the part of the operation consisting in the actual turning and version of the child, should be done with extreme caution, and only and always attempted and accomplished during a perfect interval between two uterine contractions.

Other requisite rules and precautions are enumerated so fully in most obstetric works, and so well known to obstetric practitioners, that it is perhaps unnecessary to dwell here at greater length upon them.

(To be continued.)

Hospital Reports.

CUMBERLAND INFIRMARY, CARLISLE.

SURGICAL CASES UNDER THE CARE OF W. B. PAGE, ESQ., SURGEON TO THE INFIRMARY.

(Communicated by E. THOMAS, Esq., House-Surgeon.)

FOOT TORN OFF, AND WITH IT THE FIBULA, AND MOST OF THE MUSCLES OF THE LEG; RESISTING POWER OF THE VARIOUS PARTS; AMPUTATION OF THIGH; PHLEBITIS: POST-MORTEM APPEARANCES.

John S., aged 40, a pilot, was admitted into the Cumberland Infirmary, under the care of Mr. Page, about midnight, November 5th, 1848.

Five hours before his admission, while engaged at the stern of a steam-vessel, letting out a rope which had become in some way connected with another vessel which was passing, his right foot became entangled in a coil of the rope, and in an instant, (his body being firmly fixed by the bulwarks,) his leg was dragged off with such violence as to be carried near the bows of the vessel. A cart having been procured he was placed in it and brought to the infirmary, a distance of twelve miles. When admitted, he was blanched, cold, and prostrate, the quantity of blood which he had lost on the road was great, and the amount of hæmorrhage on board the vessel was stated to have been very considerable. His only complaint was of excessive pain in the lower part of the back, where no trace of injury was apparent. He was at once put into a warm bed, and heaters were applied to the sound foot, the back, and abdomen, oozing of blood continuing to take place. In about an hour after his admission,

Mr. Page removed the limb, four inches above the knee by the double flap operation.

The state of the limb was as follows:—The skin of the leg was uninjured, and hanging loosely down around the tibia, which was entire, presenting somewhat the appearance of a trowser around a wooden leg; behind the bone, and nearly of equal length with it, hung the post-tibial nerve. The tibia was quite bare on its anterior surface, and posteriorly and externally to within four or five inches of the knee. The two heads of the gastrocnemius retained their bony attachments, the lower end of that muscle was much lacerated where it had become detached from the tendo Achillis. The foot was still in the boot, a sort of highlow, the skin was ruggedly torn around the ankle, and attached to the foot was the fibula and most of the muscles of the leg. The fibula was separated from the tibia at its superior articulation, and was fractured about an inch above the ankle; in front was the tendon of the tibialis anticus, having connected with it the greater part of the belly of that muscle, and the tendons of the extensor pollicis proprius, and extensor longus digitorum. Behind, was the tendo Achillis, with the whole of the soleus and a small part of the gastrocnemius, and the tendon of the plantaris, with the belly of that muscle attached. The tendons of the flexor digitorum longus, of the tibialis posticus, and of the flexor pollicis longus, as also that of the peroneus longus had connected with them the whole of their respective muscles; those of the peronei brevis and tertius had no muscular fibre attached.

Although almost pulseless while on the table, he revived somewhat shortly after his return to bed, and as he continued to complain much of the lumbar pain, a drachm of laudanum was given him. During the night he had some sleep; throughout the day he took as much nourishment as was desired, and gradually rallied. The pain in the lower part of the back was a frequent cause of complaint, and was considered to be dependent upon the tension and laceration to which the great sacral nerves had been subjected.

November 5th. Slept tolerably through the night, without opium; occasionally disturbed by startings in the stump; complains much of his back; takes his food well.

6th. Appears going on well.

7th. Had scarcely any sleep through the night; still complains much of the back, but not at all of the limb. Stump dressed; it has a doughy unhealthy appearance; discharge thin and fetid. Water-dressing applied. Liquor Opii, forty drops at bed-time.

8th. Had a good night; stump more swollen; cutaneous veins much congested; has great difficulty in swallowing and speaking, from a circumscribed swelling beneath the chin, and bulging into the mouth on either side of the frænum linguæ. Has much pain in the second joint of left thumb, extending up the arm; had a shivering fit; tongue dry; wanders a little; pulse very frequent; breathing short and hurried; extremely anxious and irritable. Opiate at bed-time.

9th. Had a very restless night; joint of thumb red, swollen, and painful. Has much pain in both arms, so that he cannot bear them to be moved. Stump more

swollen, and veins more distended; discharge fœtid, and mixed with flakes of lymph. Is evidently sinking.

10th. Three, a.m., died.

Autopsy eighteen hours after death. The stump only could be examined. The integuments from the front of the thigh being reflected back upon the abdomen, the cutaneous veins, including the saphena, were found much congested; their serous lining appeared healthy. The femoral artery and vein were next exposed; the ligature from the former had separated, and a plug of coagulum occupied its extremity. The vessel was healthy. The femoral vein, when laid open throughout, was found filled with pus and partially liquified fibrin; its lining membrane had lost its smooth shining surface, and had become dull and villous. The glands over the saphenous opening were enlarged, and some of them contained pus. The hip-joint was healthy, and there were no purulent deposits in the muscles of the thigh. The areolar tissue surrounding the sciatic nerve, throughout its whole extent, was found infiltrated with coagulated blood.

VARICOSE ULCER; LIGATURE OF VARICOSE VEINS;
PHLEBITIS; DEATH: POST-MORTEM APPEARANCES.

James B., aged 54, a weaver, was admitted into the Cumberland Infirmary under the care of Mr. Page, September 27th, 1848, with ulcer of the left leg, of very long standing, and a general varicose state of the veins of that limb.

October 2nd. The twisted suture was applied to the trunk of the internal saphena, and to two other superficial veins below the knee, the needle being in each case passed behind the vein. The limb was lightly bandaged, and the patient kept at rest.

9th. No untoward symptom arose until last evening, when he was attacked with violent palpitation, but, inasmuch as he had laboured under a similar affection before, he considered it of little importance. A dose of tincture of digitalis was given, from which much relief resulted. At one this morning he was suddenly attacked with shivering, which was followed by a return of the palpitation. He now for the first time complained of some tenderness in the groin, where the glands were found somewhat enlarged. The skin immediately surrounding each of the sutures, appeared unduly inflamed, but there was little if any swelling, either of the limb generally, or in the course of the cutaneous veins. The needles were removed, and the limb enveloped in cotton-wool. Throughout the day the tumultuous action of the heart continued, with a feeble, very frequent pulse. He had occasional rigors, and was drenched in perspiration. The typhoid symptoms gradually increased, and towards night he became delirious.

During the following day he continued in a partially unconscious state, but complained slightly when examination was made of the limb, which was now rather swollen. The glands in both groins were found enlarged. All the symptoms of the previous day continued, and his vital powers were rapidly diminishing.

11th. Died about noon.

Autopsy ten hours after death.—The integuments were carefully dissected from the left thigh and leg, and the superficial veins exposed. The internal saphena vein, from

the part on which the suture had been placed, up to its junction with the femoral, was found to be much larger than usual, and of a dull red colour throughout, the redness somewhat abruptly terminating at its upper extremity; it was filled with a fibrinous clot, firmly adhering to the coats of the vessel. The two other veins on which the ligature had been placed were filled with tenacious coagula, but presented no abnormal appearance; the needles had in each case produced ulceration through the entire calibre of the veins, and in these situations were small collections of healthy-looking pus. The femoral vein, which was very large, was filled with firm coagulum; the glands in both groins were much enlarged and on the left side contained pus; the right knee-joint was swollen, and contained several ounces of purulent fluid; no purulent deposits were found in any of the internal organs, or elsewhere, but the circumstances under which the investigation was made, precluded any very minute examination. The structure of the heart was healthy; the pericardium contained several ounces of serous fluid, in which were some flakes of lymph. All the venous trunks which were laid open were filled with firm coagula.

Phlebitis occurred in two other cases in this hospital, at a period intermediate between the foregoing: in the one after excision of the os calcis, in the other after the removal of a sequestrum from the femur. In these cases the disease was circumscribed, and did not cause a fatal termination by the contamination of the general circulating fluid with the morbid products of the inflamed vessel.

The series forms an interesting exemplification of the "epidemic constitution," on which the occurrence of this disease so often depends, for that four cases should have arisen in so short a period, and in a hospital which, during the seven years since its establishment, has presented no other case, can only be supposed to have been dependent upon "some predisposition of the human body, engendered by the operation of influences, which are, probably, atmospheric." Erysipelas, in a severe form, was coincident with the phlebitis in the hospital,—diseases in every way identical in type, and without doubt very generally identical as to the causes on which they depend.

PROVINCIAL *Medical & Surgical Journal.*

WEDNESDAY, JANUARY 10, 1849.

It is essentially requisite, for the purposes of good government, that those intrusted with power, of whatever description, should be men of character and integrity of purpose; should be possessed of habits of business and industry, and thoroughly acquainted with the nature and details of the subjects intrusted to their management. No one who is deficient in any one of these qualifications is fitted for employment in the public service. A man may be possessed

of a high character for integrity and of business-like habits, but if he is unacquainted with the nature of the responsibilities which he undertakes, his energy will only lead to a mischievous and misplaced activity, and his integrity cannot but be exposed to continued injury.

To refer for an instance at which no offence can be taken,—who in this day will question that the Duke of Wellington is eminently possessed of these high qualifications? and his talents being devoted to a profession in which he has shewn all the power of a master-mind, have achieved for him a reputation and general esteem which it falls to the lot of few to attain. Now let us suppose that a former government, instead of confiding the control of the Military Department to such a man, had thought fit to reward his services, at the close of the Continental war, by placing the office of Lord Chancellor in commission, and appointing him as the head of the Board, while at the same time they selected a member of the Bench of Bishops, equally eminent, perhaps, for theological learning and piety, and as a lover of peace, as Commander-in-Chief of the Army, could any one fail to see the absurdity of such a misapplication of the principles which ought to regulate the selecting for the public service of persons fully acquainted with the duties required of them. And yet, to descend to affairs of less moment (we were about to say,) than the administration of justice, and the regulation of military affairs, or rather, to take up a still higher position,—that which concerns the lives, the health, the comforts, and general welfare of the community at large, we see in these days, and by the government which now is, the care of the public health, and the control over all which concerns it, intrusted to men eminent, perhaps, for character and talent, and habits of business, but entirely unqualified by (to them,) an insurmountable want of knowledge of everything connected with health and disease. We may even go farther, and say, that the present Chairman of the Board of Health, amiable and respectable as he is as an individual, is absolutely disqualified for the office he now holds—that he is, perhaps, one of the last men in the kingdom who should have been selected for the office, as his known perversion with regard to one of the fashionable quackeries of the day renders him as unfitted for participating in anything which concerns the management of the public health, as would be

an avowed infidel for presiding over the destinies of the church, or a member of the Society of Friends for taking the command of the army in the Punjab.

We have a great respect for the higher classes of the legal profession, we believe them to be, for the most part, highly qualified by long practice and the nature of their studies and pursuits, for the investigation of all matters of evidence, and we have no objection to see gentlemen of this profession appointed to assist at the deliberations of a Sanitary Commission, or a Board of Health. On the contrary, we believe that the several departments of the public service are of so complex a nature, as to require the admixture of men of different professions in the Boards of Management; but then the nature of the department should, in all cases, lead to the selection of the individuals composing these Boards. For instance, the public service would be materially benefitted by having an army or navy physician or surgeon of eminence attached to Military and Naval Boards of various descriptions, to consult with, and advise upon, all matters connected with the health and efficiency of the soldier or sailor,—such as the selection of places of salubrity for military posts, the general care of the men, the proper adaptation of clothing, diet, &c., to the nature of the services to be performed. But, to compose a military board mainly of medical officers, with perhaps a nobleman, unacquainted with, or an amateur meddler in, military matters, as its chief, and one general officer to give advice upon such military measures as may be proposed, would be supreme folly; yet is this *mutatis mutandis* the constitution of the present Board of Health. Again, were all doubtful questions connected with the higher points of the law, instead of being submitted, as at present, to the decision of the assembled judges, to be determined upon by a board or commission, consisting of dignitaries of the church, military officers, eminent physicians, in short of anything rather than those by profession learned in the law, and presided over perhaps by some man notorious for his disregard of all law, would it be one whit more absurd than is the constitution of the present Board of Health?

Who are the members of the present Board of Health? Let them be tried by the standard we have endeavoured to lay down. 1. An avowed supporter of mesmerism as president. 2. A most zealous and benevolent nobleman, to whom

the duties of chief of the Poor-Law Commission might have been well committed, but guiltless, as far as we know, of any pretensions to medical knowledge. 3. A barrister, well-fitted perhaps by his investigations of sanitary questions for a seat at a Sanitary Board, but having no practical acquaintance of disease and its causes. And, 4, as a kind of appendage, last in rank, and evidently least in estimation, (by the Government authorities we mean,) a physician, with a temporary and subordinate appointment as *the* medical member of the Board, held we presume during good behaviour, or perhaps during the term of such compliance with the wishes of the other members of the Board, as may afford to them the sanction of his name and authority as a physician, and to himself the personal responsibility of the many ill-judged measures which a Board so constituted cannot but perpetrate.

A Board of Health, such as the present exigency requires, should have been formed mainly of men well acquainted with medical science and practice, and with the investigation of medical questions, presided over by some nobleman or gentleman connected with the Government to give the requisite Government authority, and aided, perhaps, but certainly not directed, by some such man as Mr. Chadwick. The cholera has now been about three months in this country and hitherto has happily made but little progress. In this we cannot but recognise the hand of an all merciful Providence arresting the Angel of Pestilence; and we trust that the interval thus allowed may be spent by those amongst us who have means, in providing those comforts of food, warmth, and clothing, to the poor and necessitous, which the present season especially requires, and in so raising their general sanitary condition as may render the whole population, humanly speaking, less amenable to the attack of this destructive pestilence. But should the cholera ultimately break out with any degree of severity, and extend its ravages, whether in the metropolis or the country, fearful will be the responsibilities which the noble head and the other unqualified members of the Board of Health has taken upon themselves. Vacillating and contradictory as have been their previous measures,—their recommendations opposed to the highest medical authorities in the country, and already even productive of most mischievous effects,—without possessing one qualification to entitle them to

the confidence of the public, and their lengthy manifestos treated with deserved neglect by the members of the medical profession, who alone are the fitting judges of the real value of any measures what may be proposed by them,—what must be the self-reproaches of these unfortunates, should the disease appear in all its intensity amongst us, no effectual provision taken against it, none for the medical superintendence of the health of the country generally, none for medical attendance on those who may be attacked, save under the control of the unqualified local boards of a non-medical Commission, and by the already over-tasked Medical Officers of the Unions? How can the result, when the period anticipated arrives, be otherwise than overwhelming hurry and confusion, and most pitiable indecision at head quarters, and an uncertainty and alarm to the public generally, which the instant and vigorous adoption of some systematic measures, by a Board of Health properly qualified and entitled to public confidence alone can avert?

We put it to Lord Carlisle and his colleagues, seriously and conscientiously to consider whether they are fitted for such an emergency, and, as men of honour and principle, at once to resign appointments uncongenial to their habits of life, and for which they are manifestly unqualified; and at the same time, to recommend to her Majesty the formation of an efficient Board of Health, chiefly composed of men who are, by education, profession, and sufficient experience, really capable of discharging its duties with advantage to the public.

Review.

Observations upon Bulam, Vomito-Negro, or Yellow Fever, with a Review of "A Report upon the Diseases of the African Coast, by Sir William Burnett and Dr. Bryson," proving its highly Contagious Powers. By SIR WILLIAM PYM, K.C.H., Inspector General of Army Hospitals, and Superintendent General of Quarantine. London: 1848. 8vo, pp. 311.

The Cholera of Malta in 1837; from the Italian of Giuseppe Stilon, M.D., &c., &c., Physician to the Cholera Hospital in Valetta. By SETH B. WATSON, D.M. of St. John's College, Oxford, &c. London: 1848. 12mo, pp. 178.

We have classed these two publications together, not for the purpose of giving any extended account of

either; nor with the view of entering upon a discussion on the subject of contagion, to which, in some respects, they both refer. Our intention is merely to commend the first of them to the notice of such of our readers as may feel interested therein, as containing some valuable remarks in the mode of tracing out the existence of contagion with respect to a disease in which it has long been a *questio vexata*; and to refer to the second of them for an admirable instance of the good effects of careful supervision in districts where the cholera is actually in existence, or an outbreak of it expected, and equally applicable, whatever view may be taken of its mode of communication.

Our readers are probably aware that cholera raged with great severity at Malta in the year 1837, nearly 4000 individuals falling a sacrifice to it out of a population of 100,000. In a village about a mile distant from, and in constant communication with, Valetta, six or seven of the better class of resident English and Maltese formed a voluntary committee for the purpose of adopting precautionary and remedial measures. A qualified physician, Dr. Arpa, was engaged, at a monthly salary. "A house was taken for him in the centre of the village," (we quote from a letter by Sir John Stoddart, then Chief Justice of Malta,) "properly supplied with medicines and utensils; at the door were fixed a night-bell and lamp, and near the latter a board, inscribed, 'Advice and medicine gratis at all hours, for the cholera.' But the principal and most material stipulation was, *that the doctor should walk through the village morning and evening, inquire into the state of health of every family, and if any premonitory symptom appeared, should immediately apply to it the proper remedy.* With regard to the poor, the committee determined to relieve them, by giving, not soup, but bread, with a proportionate quantity of any kind of food to which they were most accustomed; only taking care that it should be digestible, wholesome, and sufficient; and Dr. Arpa kindly undertook to superintend the distribution every morning."

After these and other appropriate precautions, the result was, that while cholera was carrying off its hundreds in Valetta, and severely visiting all the neighbourhood, the mortality being nearly 50 per cent. of those attacked, at Sliema, the village referred to, there were only two deaths out of a population of 450, though there were at least forty cases arrested in the early stages, every one of which might, and probably would, have run into collapse, but for the constant medical surveillance adopted.

Proceedings of Societies.

SHEFFIELD MEDICAL SOCIETY.

Eighth Session.—First Meeting, October 5th, 1848.

Mr. RAY in the Chair.

Dr. Bartolomé was elected President; Messrs. Law and Skinner were re-elected Secretaries.

Second Meeting, October 19th, 1848.

The PRESIDENT in the Chair.

Dr. Bartolomé, the President, read a case of poisoning by arsenic, presenting some peculiarities. [This case will be published in a future number.]

Mr. Hunter then detailed two cases of abdominal tumours. During the past summer he had had the opportunity of watching the progress of two morbid growths within the abdomen, and of examining them minutely after death. They were alike in structure, having a character not often described, not well understood, and were interesting on account of their peculiar position. The term *malignant* seems to be too loosely applied to such tumours, and they appear to approach more nearly to the strumous character, exhibiting small collections of tuberculous matter, or, perhaps, an ill-formed curdy pus.

TUMOUR OF THE LEFT KIDNEY.

The first was a renal tumour. Ellen H., aged 21, married, was first seen in May last. She was greatly emaciated. On examining the abdomen a very large hard solid tumour was found, inclining rather to the left side, where it was felt to be both harder and more superficial than elsewhere. She complained of severe pain of the whole abdomen, accompanied by a most distressing sensation of distension.

She stated that about six months before she had been kicked heavily on the left lumbar region by her husband, and that from that time she dated her illness and the growth of the tumour, but that she had never applied until this period for medical assistance. Her bowels had required aperient medicines; her appetite was good, and she had slept well, except occasionally, when she appeared to have suffered from slight but painful attacks of partial peritonitis. Urine natural, both in appearance and quantity, so as not to attract the attention. Catamenia regular. She was under treatment for several weeks, sinking daily. Iodine and mercury were exhibited without success. The case was diagnosed to be one of ovarian tumour, perhaps rare, from the large size of the solid tumour, and the absence of fluid. Dr. Elam, on being asked to look at the case, thought it proceeded from the kidney. She died in July, and on *post-mortem* inspection all the abdominal and pelvic viscera were found to be healthy, except the left kidney, which was exceedingly large, measuring about twelve inches by seven, and four inches in thickness. Very little of the form and structure remained. There was no pelvis nor excretory surface, and no trace of the normal tubular structure. The tumour had a tough leathery consistence, particularly externally, and contained many small cavities, filled with yellow granular matter, like tubercle or strumous pus. The second case was more interesting from its locality.

TUMOUR IN THE RIGHT ILIAC REGION.

William W., aged 35, a green-grocer's assistant, was seen September 15th. When first seen he was found sitting by the fire-side, his complexion slightly jaundiced, and his countenance bore the dejected air met with in abdominal disease. Abdomen swollen, and in the right and left iliac regions the swelling was more distinctly marked, and much harder, than elsewhere. The other parts of the abdomen were tympanitic, and tender on pressure; liver not enlarged. He stated that two years ago he had been kicked by a mule over the right iliac region, from which time he had never been free from uneasiness, and afterwards acute pain, in the part, nor had he been able to lie on the right side. The alvine evacuations had become irregular, and he had sent for medical assistance in consequence of his bowels not having been evacuated for ten days. He had no colic; no hernia. A dose of calomel and jalap was administered, followed by senna mixture, and two aperient pills at bed-time.

The next morning when seen, it was found that he had vomited all the medicine; bowels not open. A turpentine enema was administered, and five grains of calomel every three hours, with sulphate of magnesia, in the infusion of roses. The enema returned untinged. The calomel and salts remained. Abdomen in the same state. Full doses of croton oil were then administered, without producing any intestinal movement.

17th. Hiccough and vomiting had supervened; pulse full and firm; no evacuation of the bowels; abdomen more swollen and tender. The matter vomited was not of fecal character. He was freely bled, and with the advice of Dr. Elam the cold douche was applied, which produced temporary collapse. The pulse recovered itself, and a temporary spasmodic contraction of the abdominal muscles took place. Small doses of calomel were given, and several large injections of aloes and turpentine exhibited. Mercurial liniment had been freely rubbed over the abdomen.

18th and 19th. The abdomen was enormously swollen and painful, and in parts tympanitic. The hiccough and vomiting had so much increased as to preclude the administration of medicines by the mouth. Large injections and opiates were given, and, by way of experiment, a dose of metallic quicksilver, a remedy recommended by the late Dr. Younge, of Sheffield, was given. The vomited matters not stercoraceous.

On the evening of the 19th he sent an urgent message, begging to be relieved by operation, as he believed his case to be rupture. In consultation with Dr. Elam, Messrs. Parker and Micklethwait, it was determined, as there seemed to be no other prospect of saving him from death, to establish an artificial anus, according to Amusat's lumbar section, which does not interfere with the peritoneum, nor endanger any important vessels. In this case the cæcum appeared to be the highest seat of disease, and the right iliac region most distended. An incision about four inches in length was made through the skin obliquely across the anterior edge of the quadratus lumborum, and across the common tendon of the abdominal muscles; it was continued through muscular and fascial fibres, until the back of the cæcum was exposed. This

was not found to be so much distended as was expected, still it protruded from the wound, and was attached by two sutures on each side, to the lips of the wound, and was slit up. A quantity of feces escaped, but not so large a quantity as was anticipated. On examination, the small intestines were found to be so much distended, as to cause apprehension of obstruction higher up, and as a proof of obstruction lower down in the tube, a large injection did not find its way to the wound. Very little relief was afforded; occasionally a small quantity of feces passed by the wound, and a small globule of mercury was found in the dressings. Vomiting and hiccough continued until the 22nd, when death closed the scene.

On inspection, on the 23rd, a tuberculous mass was found attached to the inner surface of the abdominal parietes in the right iliac region, having a very strong leathery and blackened coat, containing yellow matter, most probably incomplete pus of a chronic abscess in a scrofulous subject. It was larger than a hen's egg, and fluctuated slightly. Small intestines enormously distended, and the lower part of the ileum entered into the tumour, and three inches below it emerged, presenting a natural appearance. The large intestines were of natural appearance; part of the transverse arch of the colon entered the tumour, and passed from it as the smaller intestine had done. The two portions of intestine passing through the tumour were found to be pervious, so that this may be regarded as a case of fatal obstruction of the intestine, arising entirely from external mechanical pressure, and had there been only one (the lower,) obstruction, it is probable that the operation would have been successful.

Foreign Department.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DE MEDECINE, PARIS.

The sittings of the past month have been mainly occupied by the discussion on gun-shot wounds, but before we give the continuation of this important subject, it will be advisable briefly to notice the following communication, which has been recently presented:—

AMPUTATION.

M. Sedillot has produced a memoir "On the Means of Ensuring Success after Amputating." This is best accomplished according to the author, by abandoning the circular operation altogether, and by substituting the *single flap* operation, which consists in making one large flap, involving two thirds of the anterior circumference of the limb, and removing the posterior third by an incision at right angles to the bone. The large anterior flap then falls by its weight alone, over the wound, and is readily kept in situ without the intervention of dressings. The flap is united on each side by a single suture, and a central canal is made for the escape of the purulent or other secretions, by previously inserting a piece of lint upon the extremity of the bone, and allowing it to hang out below the line of union of the flap. This is removed as soon as there is no

longer any fluid to escape. The stump itself is left uncovered, so as to allow of fomentation, the application of cold, or syringing of the interior of the stump, as occasion may require. The merit of M. Sedillot's plan consists mainly in preventing the accumulation of foul secretions in the interior of the stump, from which the chief danger of amputations is known to arise.

GUN-SHOT WOUNDS.

M. Velpeau defended the old idea of "burning" in gun-shot wounds, not that the ball retained sufficient caloric actually to burn the parts, but because the contusion produced by its passage caused mortification, which to all intents and purposes resembled the eschar from a burn. As regards treatment, he does not consider that the employment of refrigerant applications is so useful as is represented. He likewise objects to general bleeding as a preliminary. He did not order blood-letting in a single recent instance, and yet has not lost one by excess of reaction. He is not an advocate for "debridements," except under particular circumstances. He agrees with M. Malgaigne as to the injurious consequences of confining the wounded to rigid diet; he believes that a judiciously nutritious diet tends to prevent unpleasant consequences. As to amputation, if it is deemed necessary, he considers that it should be performed at once; the main question, whether in a severe gun-shot wound we should endeavour to save the limb or amputate, he does not consider so easy of solution, unless there is great destruction of the bone, when he considers the attempt to save the limb more than useless. One of the reasons alleged in favour of amputation is, that we substitute a simple for a contused wound. M. Velpeau does not acknowledge the justice of this opinion. On the whole he tries to save as many limbs as possible. In June last he amputated only six times in twenty-six cases of fracture, in the remainder he tried to save the limb. Of these, two only have died, the eighteen are cured, or bid fair to get well. Of the amputated cases he lost one-third. "*The older I grow*," observed M. Velpeau, "*the less I amputate*."

M. Huguier, who followed M. Velpeau, commenced by an examination of the respective diameters of the openings of entry and exit of gun-shot. He distinguished three types of these wounds. 1. Those in which the two openings are of equal size, and it is impossible from them to predicate the direction whence the ball came. 2. Those in which the opening of the entry of the shot is larger than that at which it escapes, in consequence of having struck a hard body, as a bone. 3. Those in which the reverse is the case. He regards the depression of the edges of the wound of entry, and the extension of the outer wound, as not to depended on, as they can only be seen for a short time after the reception of the wound. Other characteristics of gun-shot wounds, as charring and ecchymosis of the tissues, are also occasionally wanting, so that in a medico-legal point of view it is sometimes impossible not only to tell the direction of the ball, but even to be positive as to the wound being caused by a gun-shot at all. M. Huguier then reviewed the effects of

gun-shots upon different tissues, as skin, muscle, bone, blood-vessels, &c. In regard to wounds of bone, he maintained that when a ball traverses a bone on one side, and the other portion is fractured by the shock, the fractured ends always become necrosed.

The next speakers were MM. Jobert and Begin. M. Jobert entered at some length upon all the most interesting questions connected with gun-shot wounds. He at one time entertained the common opinion respecting the wounds of entry and escape of the ball, that the former was smallest with depressed edges, and the latter had the edges everted; later experience has convinced him that though the two openings are rarely similar, they vary *ad infinitum*. Sometimes he has seen the wound of entry small and round,—that of exit large and irregular; sometimes he has seen this reversed, and again he has met with them both of the same size. M. Jobert condemns the immediate extraction of balls unless very superficial. The treatment of gun-shot wounds differs according to the time which has elapsed since their infliction. The first period is one of shock and collapse, then there is a period of reaction and inflammation, and, thirdly, one of suppuration; it is evident thus a different treatment is required for each. He regards "debridement" as useless and dangerous, excepting in certain cases, in which the whole limb becomes greatly tumefied, with intense pain and agitation. In these cases a few incisions of five or six inches in length through the skin and aponeurosis has given immediate relief. M. Jobert concluded with some observations on comminuted fractures and amputations; on the former point he states that he has not amputated as a matter of course. In fractures, with penetration of the elbow-joint, he has saved the limb, which has recovered with partial ankylosis. So also in comminuted fracture of the head of the humerus, unless there is great destruction of the soft parts, he has treated the case effectually by a vigorous antiphlogistic plan. Comminuted fractures of the thigh without great injury of the soft parts, have also been subjected to regular treatment; fracture, with opening of the knee-joint, has also been similarly managed. He has saved three out of six thus treated, while Bell defied any one to save one limb in a thousand. His plan of treatment is to bleed largely, to use cold cataplasms during the inflammatory period, and warm fomentations when suppuration has commenced. He never extracts the fragments, and does not meddle with the original wound. Long incisions are made at a distance from the wound when there is much distension. By this treatment, conjoined to proper instrumental aid, M. Jobert affirms that he has great success. If, however, the soft parts are greatly injured, or large vessels are wounded, or articulations largely opened, amputation is the only resource. But, amputation being decided upon, should it be primary or secondary? This important question the speaker now enters upon. After comparing the opinions of the supporters of both sides of the question, he expresses his own conviction that, when amputation is necessary, it ought to be performed immediately, but he does not by this term mean that amputation should

take place during the period of collapse or shock; he waits till reaction is established, and the great functions of the body have recovered their balance. All he is anxious about is, to operate before the period of inflammation ensues. Consecutive amputation is, in his opinion, almost always unsuccessful.

M. Begin, who next addressed the Assembly, commenced his speech as did the others, by an account of the aspect of the entering and exit wounds. These characters, which he considers to be such as are generally described, soon disappear, but are again evident after cicatrization, when the former will exhibit a concave round scar, the latter an elevated irregular one. This speaker did not agree with M. Jobert, in his admiration of John Hunter's work on "Gun-shot Wounds;" according to him the work is full of errors. He approves of "débridemens," whenever the tissues surrounding the traverse of the ball are engorged, and as it were strangulated, and appealed to his own experience in 1813, as proof of the advantages of the operation. He differed from M. Jobert in reference to the extraction of the ball and other irritating bodies, which he considers ought to be done whenever practicable. M. Begin thinks that fractures from fire-arms, in most cases, require immediate amputation. If an attempt to save the limb in these cases be contemplated, the splinters are to be removed, unless strongly adherent, otherwise a secondary amputation will often be necessary. His views respecting the question of amputation are shewn in the following *resumé*:—

1. The wounds which are made by fire-arms never unite by first intention, but on the contrary inflame and suppurate throughout their entire extent.
2. Whenever the track of the wound is covered by dense aponeurotic structures, the orifices should be dilated, so as to allow a ready exit to the discharges.
3. The balls, splinters, &c., should always be extracted when possible, so as to reduce the wound to as simple a condition as possible.
4. Gun-shot wounds, after being thus treated, should have the simplest possible dressing; water-dressings are the best.
5. Fractures should be reduced immediately, and the limb placed in appropriate apparatus.
6. When amputation or resection of the fractured ends of the bone is necessary, the operation should be done at once, unless the patient be in a state of collapse.
7. During the inflammatory stage of gun-shot wounds an antiphlogistic regimen is required, but as soon as suppuration is established, the patient requires nourishing diet, and tonic medicines.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DES SCIENCES, PARIS.

The principal memoirs presented since our last report are—

1. By M. Parchappe, "On the Gradual Diminution of the Cerebral Mass in Persistent Insanity."
2. A memoir by M. Demarquay, "On the Anomalies of the Right Subclavian Artery, with Absence of the Recurrent Nerve." (See *Prov. Journ.*, 1848, p. 584.)
3. A paper by M. Bourguery, "On the Capillary System."—4. "On Confluent Small-pox," by M. Serres, neither of which are important.

POOR-LAW MEDICAL COMMITTEE.

SANITARY DUTIES RECENTLY IMPOSED ON POOR-LAW
MEDICAL OFFICERS.

(Copy.)

To the Honourable the Poor-Law Board.

The Memorial of the Chairman and Committee of the
Medical Officers of Unions in England and Wales

Sheweth,—

That your memorialists having been duly appointed a Committee at a Convention of Poor-Law Medical Officers, assembled at the Hanover Square Rooms, on the 27th October, 1847, for the purpose of seeking an amelioration of the present system of Poor-Law Medical Relief, respectfully beg to call the attention of your Honourable Board to the powers conferred by the "Act for the Prevention of Nuisances and Diseases," whereby your Honourable Board is authorised to require from the Medical Officers of Unions, the performance of various duties in reference to Sanitary Regulations, without awarding any remuneration for such onerous and important services.

Your memorialists beg to protest firmly, but respectfully, against the imposition of such duties,—

1st. Because the said duties are altogether foreign to the special duties of Union Surgeons as medical attendants on the sick poor, and are not named, nor even contemplated by the Honourable the Commissioners of Poor-Laws in their order defining the duties of the Medical Officers of Unions, and because they are entirely distinct from the functions assigned to the Medical Officers of Unions in their contracts with the Boards of Guardians.

2nd. Because, such sanitary duties not being embraced in the legal contracts, nor in the instructions of the Honourable the Poor-Law Board, under which the Union Surgeons entered into their engagements with the Boards of Guardians, the orders of your Honourable Board are a violation of the rights of Union Surgeons as private citizens, and are contrary to the spirit of the common law of the land.

3rd. Because it is unjust to require the Medical Officers of Unions to perform arduous and valuable services without remuneration, and because such orders are at the present time peculiarly obnoxious and oppressive, inasmuch as the Medical Officers of Unions have for a long time complained of the great inadequacy of the present payments for their ordinary services as the medical attendants of the sick poor.

Your memorialists therefore pray, that your Honourable Board will imperatively award such remuneration for sanitary services as shall be equitable and just.

Signed in behalf of the Committee,

THOMAS HODGKIN, M.D., Chairman.

CHARLES F. J. LORD, Hon. Sec.

Convention of Poor-Law Medical Officers,
4, Hanover Square, Dec. 9th, 1848.

Poor-Law Board,
Somerset House, 18th Dec., 1848.

Sir,—I am directed by the Poor-Law Board to acknowledge the receipt of a Memorial of the Chairman and the Committee of the Medical Officers of Poor-Law Unions, acting under the authority of a Convention of Poor-Law Medical Officers assembled on the 27th October last, in which Memorial, the attention of this Board is called to the powers conferred by the 11th and 12th Vict., cap. 123, in requiring from the Medical

Officers of Unions the performance of various duties, having in view the removal of nuisances and the prevention of contagious and epidemic diseases; and a protest against the imposition of such duties is conveyed therein for the reasons set forth.

The Board desire to observe that the Act of Parliament itself here referred to, and not the Poor-Law Board, has imposed the duties rendered obligatory upon the Medical Officers under that Act.

All that this Board are able to do in the matter is, to point out to the Guardians of Poor-Law Unions the provision contained in the General Consolidated Order of the Poor-Law Commissioners, which enables them to give gratuities for extraordinary services rendered by their officers. Also, the provisions of the Statute rendering it competent to the Guardians to appoint persons in aid of their officers, where the duties they are required to perform under it would press too much upon the time of those officers. This course the Board has followed in very many instances, since the directions of the General Board of Health have been issued.

I am, Sir,

Your obedient servant,

W. G. LUMLEY, Assistant Sec.

To C. F. J. Lord, Esq., Honorary Secretary,

Committee of Poor-Law Medical Officers,
4, Hanover Square.

The General Board of Health,

Gwydyr House, Whitehall,

16th December, 1848.

Gentlemen,—I am directed by the General Board of Health, to acknowledge the receipt of your Memorial dated the 12th instant, calling the attention of the Board to certain provisions of the Nuisances Removal and Diseases Prevention Act, whereby they are empowered to require and enforce the performance of various duties in reference to Sanitary Regulations by the Medical Officers of Unions, and pressing upon the attention of the Board the injustice of enforcing the performance of such duties without awarding just and suitable recompense; and praying that the Board will deem it expedient to issue such instructions as shall give the Union Surgeons performing the duties of a Medical Officer of Health, a legal claim to remuneration.

I have to inform you in reply, that in the object of your Memorial,—namely, that the Union Surgeons should receive fair and adequate remuneration for the extra services which are required of them under the Nuisances Removal and Diseases Prevention Act, the General Board of Health entirely concur; but they have to call your attention to the fact, that the power of requiring the performance of those duties by the Union Surgeons, and the payment of all expenses which may be incurred therein, are left entirely with the Boards of Guardians, by the 12th and 14th Sections of the Act itself, and are not determined by the regulations of this Board, as you would appear to apprehend. The Board, therefore, are not in a position to enter upon questions of right, upon which they are not authorised to adjudicate, but that you may be made acquainted with the feeling of the Board upon the subject of remuneration for these extra services, I am to transmit to you, herewith, a copy of the 2nd Notification issued by the Board on the 31st October last, and to direct your attention to the following paragraph therein marked in the margin, which would appear to have escaped your notice:—

“It appears to the General Board of Health to be absolutely necessary, in the present emergency, to concentrate responsibility on the Medical Officers, and to

entrust them with discretionary powers, because the rapidity of the course of cholera will not allow them to wait for direction from the Guardians at their weekly meetings; and seeing the many arduous duties that devolve upon the Medical Officers, the General Board of Health cannot but express a hope that the remuneration of these officers will be more proportionate to the value of the services required of them, than it was upon the former occasion.”

I am, Gentlemen,

Your most obedient servant,

HENRY AUSTIN, Secretary.

To Thomas Hodgkin, Esq., M.D., Chairman, and Charles F. J. Lord, Esq., Honorary Secretary of the Committee of Medical Officers of Unions in England and Wales.

General Retrospect.

PATHOLOGY AND PRACTICAL MEDICINE.

NEW DIAGNOSTIC SIGN OF INTERMITTENT FEVER.

This sign, pointed out by M. R. Vanoya, consists in a peculiar condition of the mucous lining of the lower eye-lid. In a healthy subject this surface presents a more or less vivid red colour; but when intermittent fever has lasted some time in any subject, another appearance is observed, constituted by a pale crescentic line, the extremities of which correspond to the canthi of the eye, and its concave edge embracing the sclerotica: it is visible on lowering the lid and directing the subject to look upwards. This appearance is dispelled by the internal administration of febrifuge medicines, and persists so long as the patient is exposed to a relapse.

—*Medical Times.*

CYNANCHE PHARYNGEA FROM DISEASE OF THE MUCOUS FOLLICLES.

This disease, of which Chomel has observed twenty-two cases, although it is by no means of rare occurrence, has hitherto been overlooked. It consists of hypertrophy of the mucous follicles of the pharynx, soft palate, and uvula. It has been seen much more frequently in males than in females, chiefly at the age of from five to seventeen years. It often occurs along with a peculiar form of the upper jaw, in which the palatine arch is elevated, the cavity of the nose rendered smaller than natural, and nasal respiration to a great extent prevented. The upper lip in such persons is short, and the mouth is habitually kept open. Hence they are peculiarly liable to this disease from the perpetual tendency to dryness of the pharynx. Certain professions, as that of public singers, act as occasional causes of this disease. The first symptom complained of is a sense of uneasiness in the back part of the throat, with constant effort to get rid of the mucus which collects in that quarter. The patient has also a constant craving for water, which produces temporary relief. There is guttural cough and expectoration of small pellets of tough mucus, sometimes streaked with black. The voice of singers is contracted in range and impaired in quality, and patients in general have great difficulty in speaking aloud for any length

of time. These circumstances are apt to induce a suspicion of phthisis. On examination of the throat, the arch of the palate is seen to be covered by small red points, which are more thickly disseminated on and near the uvula. These become more numerous and larger as the disease advances, till at length they run into each other, forming ridges and raised patches, between which only a small part of the mucous membrane retains its natural appearance. The affection is essentially chronic in its progress; it does not endanger life, and sometimes disappears without treatment. It should be observed, that hypertrophy of the mucous membrane and follicles often exists in public speakers and singers, quite independently of disease, which produces no symptoms and demands no treatment. Gargles with borax or alum are generally sufficient to cure this malady in the earlier stages; should these fail, or should the morbid changes be considerable before treatment is commenced, cautious cauterization by the solution of nitrate of silver, or of nitrate of mercury, or by nitric acid diluted with three parts of water, and applied by means of a small piece of sponge, must be had recourse to. Baths, the douche, and the use of mineral waters containing sulphur, are also useful. Loud or continued speaking or singing must be avoided. The food must be well masticated, and must consist of articles perfectly free from acridity or acidity.—*Gazette des Hôpitaux*, June 1, 1848, and *Monthly Journal*, July.

SPIGELIA MARYLANDICA IN PRURITUS ANI DEPENDING UPON ASCARIDES.

Dr. Koreff gives two cases of rebellious itching of the anus, which yielded to this treatment after the fruitless employment of the usual remedies. The root is the only part of the plant which possesses the required virtue, the leaves being perfectly inert. The formula employed was as follows:—

Radici Spigeliæ dr. iss.
Mannæ oz. j.

To be infused in a pint of boiling water. Dose a cupful three times a-day, for three days. A concentrated decoction of the root may at the same time be used as an enema.—*Revue Médico-Chirurgicale*, Sept., 1848.

OVARIAN DROPSY.

Dr. Tilt closes an interesting series of papers on ovarian dropsy with the following practical deductions:—

1. That small and moderate-sized tumours may be cured by preparations of iodine given in large doses internally, as well as externally, the contents of the cysts being re-absorbed by the walls of the cyst, as in the cases seen by Dr. Rayer and Madame Boivin, or else voided per rectum, or per vaginam, as in many recorded cases.

2. That tapping the abdomen, if employed as a palliative, and without any view towards the radical cure of the patient, should be deferred as long as possible, modern statistics having confirmed Morgagni's opinion of the danger of this operation.

3. That when the cyst is voluminous, and felt bulging

in the vagina, there is a sufficient number of successful cases to countenance the puncture of the cyst per vaginam, an India-rubber sound being left in the cavity of the cyst, and moderate pressure being made to the abdomen.

4. That the rupture of the monolocular ovarian cysts, with the effusion of their contents into the peritoneal cavity, instead of being attended (as is even now generally supposed,) by the most alarming symptoms of peritonitis, is, generally speaking, unaccompanied by any alarming symptom whatever, thus warranting the subcutaneous incision of the cyst—an operation which has been successfully performed.

5. That the ulcerative opening of the cyst, after adhesion of its walls to the abdominal parietes, (the new plan of treatment I propose in certain cases of ovarian dropsy,) is supported alike by the complete success by which it has been followed, in the case I have recorded, and by the success attending a somewhat similar plan of treatment in hydatid cysts of the liver.

6. That ovariectomy should be reserved for cases of *multilocular ovarian cysts*, and those *monolocular cysts* where there is a considerable amount of solid deposit, unless from their diminutive size, or the absence of symptoms, they do not menace the patient's life by their rapid increase.—*Lancet*, Nov. 11, 1848.

LOCAL APPLICATION OF CHLOROFORM IN LUMBAGO.

Three cases of this disease are detailed by M. Moreau, in which immediate and permanent relief was obtained by the application to the loins of a piece of lint on which some chloroform had been poured. Oil silk ought to be laid above the lint, to prevent the evaporation of the chloroform. In a few minutes the patient complains of a burning heat in the part, which becomes red, and occasionally vesicles are formed; at the same time the rheumatic pain disappears. The author thinks that the cure cannot be attributed solely to the counter-irritation, as in one of the cases recorded sinapisms had been previously employed, without success. He supposes the chloroform to reach by imbibition the cutaneous and superficial muscular nerves, on which it exerts its anæsthetic power.—*L'Union Méd.*, Oct. 21, 1848.

In a case of pelvic tumour, where the patient suffered from severe pains of the inferior extremities, probably in consequence of the nerves being compressed in traversing the pelvis, the usual means of affording relief having failed of success, M. Legroux determined to try the local application of chloroform. A sponge containing chloroform was placed in the foot of a large boot of wax-cloth, constructed for the purpose, so that the vapour only came into contact with the skin. A feeling of warmth, prickling, and numbness, was soon experienced. The application was continued for several hours, when complete anæsthesia was established, and the neuralgic pains had entirely ceased. The absence of pain continued several days, and the same treatment was equally successful on its return.—*Ibid.*, Oct. 31, 1848, and *Monthly Journal*.

SURGERY.

WARTS OF THE VULVA.

It sometimes happens that the vulva is covered with a luxuriant growth of warts. "They are, in certain cases, so abundant as to dispart the labia, filling up the entire sulcus, and rising as a great convex mass of pale cauliflower-looking tumour, quite convex above the general level. Upon further separating the labia, so as to open the sinus pudoris, they are perceived to be small warty excrescences from the mucous body of the mucous membrane, and differ not from the warts on children's fingers except by their greater softness, which depends on their being always bathed with the sort of milky humour of the labial membrane. They often bleed when touched; and, when pinched off with the finger-nails, the broken surface trickles with blood, which soon ceases to flow. I have found that, when the entire labium, right and left, has been quite incrustated with warts as above, I could with the probe separate them anywhere; for they are distinct from, though in lateral contact with, one another. You will readily include a great number of them in a ligature, which, being tightly tied, they drop off after some hours. The readiest way to remove them is to snip them off, several at a time, with scissors curved on the flat. This being done, and the surface being lightly touched with the nitrate of silver pencil, or with a solution of sulphate of copper, the mucous tissue is not very likely to reproduce them".—*Females and their Diseases*. By Professor Meigs. Philadelphia, 1848.

CONCLUSIONS RESPECTING GUN-SHOT WOUNDS.

The facts established by the recent events in Paris are as follows:—

1. The appearance of gun-shot wounds depends on the time of the occurrence of such accidents; at an early period the wound of entry is larger than that of exit. Suppuration being once established, there is a difficulty in distinguishing the two; further on in the process the characters become again well marked.

2. In civil hospitals, contra-distinguished from those attached to a moving army, more may be done to save limbs than is commonly thought.

3. With respect to the removal of foreign bodies, the mass of evidence is in favour of such a proceeding. Exceptional cases may occur.

4. In primary hæmorrhage we must act as in the case of other wounds, tie the artery as near the wound as possible. In consecutive hæmorrhage, on the contrary, we must put the ligature on the main trunk.

5. Secondary amputation should never be thought of as a thing to fall back upon; amputation should be primary, or not at all.

6. *Débridemens* should be strictly confined to freeing aponeurotic structures in a state of constriction.

7. In matters of treatment, our old English system seems best,—cold water dressings instead of ice; when the skin is broken, the latter is inadmissible.

8. As a general rule, the part should be disturbed as little as possible, the pulse and tongue being sufficient indices of the state of the health of the patient.

9. Operations should never be performed in a state of collapse.

10. Age and mental conditions seem to have much to do with the mortality. According to M. Baudens, officers are cured with more difficulty than common soldiers; generals generally died.

11. Anæsthetic agents have in most cases proved safe and beneficial.—*Medical Times*, Nov. 4, 1848.

EMPLOYMENT OF COLLODION IN FISTULOUS OPENINGS.

Dr. Yvonneau, of Blois, relates the following case:—A little girl, five years old, was brought to me, whose right cheek was totally perforated very near the commissure of the lips, in consequence of an abscess which had burst externally, and which had, very neglectfully, not been opened early within the mouth. Both the upper and lower jaw were attacked by caries, and the cheek had formed adhesions with the gums. The part had the shape of a funnel, the apex formed by a fistulous opening, about half an inch in diameter, through which the saliva and the liquid taken into the mouth were dribbling. The continual loss of saliva gave the child an inordinate appetite, in spite of which it was wasting very much. The breath was also extremely fetid. I operated on the 11th of October, in the following manner:—After having rendered the child insensible by chloroform, freed the adhesions, and removed a portion of the lower jaw which was detached, I then included the fistulous opening in two semicircular incisions, and brought the lips of the wound together. These were kept in contact by a twisted suture upon four needles and strips of adhesive plaster, and a roller around the chin finally contributed in keeping the parts steady. The whole of the dressings were, however, very soon so much soaked with saliva that they would have had to be changed every two or three hours to give a chance of keeping them clean. The third day after the operation I perceived that portions of the liquid which the child drank found their way through the fistula as previously; the parts had ulcerated upon the needle and the fistulous opening was larger than before. Puzzled and annoyed at this failure, I bethought myself of using collodion, which I had employed before with benefit in the place of dextrine for applying bandages to fractures. I obtained perfect stillness in the child by chloroform, and the margin of the wound being exactly brought together by an assistant, I placed strips of very good adhesive plaster across it in an imbricated manner, which included the chin, the cheek, and the ala nasi, and by means of a camel-hair pencil I covered the whole with a layer of collodion. I expected thereby to render the plaster not only thoroughly adherent, but impermeable to the saliva. Three days afterwards I was obliged to remove the dressings, as the child had amused herself by pulling off a strip, and in doing so I was very agreeably surprised to find the wound covered with granulations, and the fistulous opening reduced to a line or two in diameter. Full of expectation, I re-applied the dressings in the same manner as above. I did not interfere with it for the five following days,

when I cut away the apparatus, and found, instead of the ugly foramen, a clean linear cicatrix, which will be almost effaced by time. The colloidion has evidently been of very great service here, for not only did it prevent the imbibition of the dressings from capillary attraction externally, but also effectually prevented the saliva from coming in contact with the external part of the wound, and thereby favoured the formation of granulations in the latter. Is it not probable that strips of adhesive plaster thus applied will very conveniently replace the needles in the operation for hare-lip?—*Union Médicale* and *Lancet*, Dec. 23, 1848.

OBSTETRIC MEDICINE.

QUININE A PROPHYLACTIC OF PUERPERAL FEVER.

During an epidemic of puerperal fever, which occurred in the hospital of Rouen in 1843, the thought occurred to Dr. Leudet of ascertaining by experiment whether quinine possessed the power of enabling the economy to resist the contagion of this disease. From the 21st September 1843 to the 8th January 1844, 83 women were delivered in the Hôtel Dieu of Rouen; in nine of these women to whom quinine was given, not one case of puerperal fever occurred, while of the remaining 74, who received no special treatment, 21 suffered from the disease. In two later epidemics, its utility was subjected to a more extensive trial. From the 8th of July to the 9th of August 1845, of 26 cases of delivery, 15 were treated with quinine; one only of these was attacked, while of the remaining 11, eight had puerperal fever. Lastly, during an epidemic which prevailed in Rouen, from the 19th of March to the 21st of April 1846, there were 36 deliveries. Quinine was prescribed to 17 women, only one of whom had fever, while of the 19 who were submitted to no special treatment, 11 were attacked with the disease.

Dr. Leudet begins the prophylactic treatment about four hours after delivery, by the administration of five grains of quinine, which dose is repeated twice during the same day, at intervals of five hours. On the second day the same doses are given; but on the third day they are diminished to three grains thrice daily, and are so continued for four days more.

This method is adapted for the more common form of epidemic, where the fever does not present itself for three or four days after delivery. When it appears during parturition, or immediately after it, Dr. Leudet advises that the use of quinine should begin with the first symptoms of labour.—*Thèses de Paris*, 1847, from *Monthly Journal*.

CONTUSION OF THE SCROTUM IN BREECH-PRESENTATION.

Van Hoeslorbeck calls attention to contusion and consequent gangrene of the scrotum as a not unfrequent event in breech-presentations. Having met with three cases in which the child died from sloughing of the parts, he has since always adopted the precaution of pushing the scrotum up above the union of the thighs, and preventing its descent by mechanical means.—*Revue Médico-Chirurgicale*, Sept., 1848.

RETROVERSION OF THE UTERUS DURING PREGNANCY.

M. Van Heugel relates a case in which spontaneous reposition of the uterus took place after emptying the rectum and colon of an immense quantity of impacted fæces.

A young woman, three months advanced in pregnancy, experienced great difficulty in making water, with pain in the abdomen. On examination the os uteri was found under the pubes, and the fundus projected upon the sacrum, and depressed into its hollow. The urine was drawn off, and a large enema was exhibited by means of a tube, which was passed up to the sigmoid flexure; an enormous quantity of scybala were thus removed, and upon a subsequent examination it was found that the fundus had resumed its natural situation.—*Revue Médico-Chirurgicale*, Sept., 1848.

LITERATURE OF THE NINETEENTH CENTURY.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

A friend, desirous of placing a son with a medical man, inserted in one of the London papers an advertisement to that effect. Amongst numerous answers, he received one, of which I enclose you a *correct* copy. Its singularity will, I am sure, amuse you; and possibly you may deem it worthy of a corner of your Journal for the amusement of your numerous readers.

I am, Sir,

Yours faithfully.

T.P.F.

Kimbolton, Oct. 16, 1848.

(Copy.)

There will be a vacancy at ——— when your Son may have ample time to prosecute with vigour his studies, In the Branches of Clinical practice, the science of Pharmacy, Materia Medica in the Intimate or Ultimate principles of Research. The Physical operational intuitive elements during the varied precession of the Analytical and Synthetical Systematology of Chemistry as applied to the spheres of The Physician whilst he shall have the advantage of my experience in artial Chemistry and Practice, blent with the elements of the Psychologician should you place him under my roof. There I will gurantee him ample leisure with the privilege of attending my vindications of each immediate referential influence and the developable action of such on or over the Physical structure in the Laboratory, whilst he may prosecute the higher branches of Anatomy and the general Classifications of the Pharmacopœia either in this city or with me at the Scene of General duties. The spot is famed for its magnificent clime, in point of Salubrity, the grandeur of its scenery, the ample means, easy and moderate of access, whose adjacent Islands, Lochsides, and teeming vales abound with the most sublime elements of natural and physical beauty and fertility for the opening mind of the young student. There the Occuminal features of the Physical scholar's health and the wealth of his mental forces will be at liberty to expand and be fertilized, whilst the harmonious laws that regulate the march of the Savant, during the hourly

revolutions of his onward investigations, will be patiently submitted to the studential inquirer. His mind will not be fettered by rigid dogmatisms nor injured by a too late system of Characedic experimentalization. He may have private apartments attached or apart from the sphere of action, as shall be thought best.

I have the honour, &c.

FALKNER'S LIQUOR OPII SEDATIVUS.

The testimonials in favour of this lately-introduced preparation are so decisive and unquestionable, that we feel it our duty to recommend it to notice. Like Mr. Battley's solution, its exact composition has not been made known, but we have no hesitation in stating that it is possessed of many advantages as a sedative, and is especially capable of being employed with relief in cases where other opiates cannot be borne. Mr. Cole, the House-Surgeon of the Worcester Infirmary, states that it has been for some time used almost exclusively in that Institution, and is much approved of by the medical officers. We have also seen it highly spoken of by Mr. John Pemberton, House-Surgeon to the Droitwich Lunatic Asylum; by Dr. Rootes, of Ross; Messrs. Walsh, of Worcester; Broughton, of Ruyton; Potheary, of Munslow; Cooke, of Newent; Williams, of Talgarth; Wilding, of Church Stretton; and others who have made trial of it.

It was intended by Dr. Hastings, who is well acquainted with its merits, to draw attention to this preparation at the Anniversary Meeting of the Provincial Medical and Surgical Association, at Bath, held in August last, from which, however, he was prevented by the pressure of other matters of importance.

Medical Intelligence.

APPOINTMENTS.

John Topham, M.D., has been elected Physician, and E. F. Dehane, G. Edwards, and J. T. Cartwright, Esqrs., Surgeons, to the South Staffordshire General Hospital, Wolverhampton.

George S. Jenks, M.D., Fellow of the Royal College of Physicians, has been elected Physician to the Sussex County Hospital, Brighton, in the room of Dr. Blair, resigned.

M. Berard, Professor of Physiology at the Faculty of Medicine, Paris, has been appointed Dean of the Faculty, in the room of M. Bouillaud, superseded.

M. Velpeau has been elected President, M. Bricheteau Vice-President, and M. Gibert, Secretary, of the Academie de Médecine, Paris, for the year 1849.

Matthew Talbot Baines, Esq., has been appointed Poor-Law Commissioner for England, in the room of Mr. Buller, deceased.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates Thursday, December 21st, 1848:—Robert Ingram Stevens, London; James Bernard Rack, Prestbury, near Cheltenham; William Henry Slade, Frome; John Marsh, Mansfield; Robert Savignac Stedman, Great Bookham, Surrey; Thos. Coutts Morison; George Harpley Beck, Norfolk;

Pryce Jones, Helmston, Hants; Nicholas Marsh, Liverpool; George Carfrae Hope, London; Frederick John Earle, Winchester; Thomas Selby Blanshard; Philip James Elborough; Samuel Weston, Devenish; Banfield Teague Vivian, Corwan, Cornwall; Frederick William Armstrong Rawlins, Congleton.

Thursday, December 28th:—John William Leacroft, Derby; David Hope, Deptford Bridge.

OBITUARY.

Died, December 19th, aged 77, at Cheltenham, William Greaves, M.D., late of Mayfield Hall, in the county of Stafford, a Magistrate for the counties of Stafford, Derby, and Gloucester.

December 20th, at Brighton, aged 66, George Drysdale, M.D., R.N.

December 20th, aged 49, Thomas South, Esq., Surgeon, of Judd Street, Brunswick Square.

December 22nd, in Russell Square, aged 62, James Cowles Prichard, M.D., one of the Commissioners of Lunacy. Dr. Prichard was formerly in practice in Bristol, and well known as the author of several excellent works, in particular by his researches on the "Physical History of Man." On the occasion of the meeting of the Provincial Medical and Surgical Association at Oxford, in the year 1835, Dr. Prichard read the Address in Medicine, on which occasion the Degree of Doctor of Medicine in that University was conferred upon him.

December 26th, at Oxford, Charles Lewes Parker, M.A., Surgeon to the Radcliffe Infirmary, Oxford.

December 29th, in Finsbury Square, aged 68, William Martin, Esq., Surgeon, R.N.

BOOKS RECEIVED.

The Cholera at Malta in 1837. From the Italian of Giuseppe Stilon, M.D., &c., &c., Physician to the Cholera Hospital in Valetta. By Seth B. Watson, M.D., &c. London: Churchill. 1848. pp. 178.

On Cancerous and Canceroid Growths. By John Hughes Bennett, M.D., F.R.S.E., Fellow of the Royal College of Physicians, Professor of the Institutes of Medicine, &c., in the University of Edinburgh. Sutherland and Knox. London: Simpkin and Marshall, and Highley. 1849. 8vo., pp. 260. Numerous Illustrations.

Practical Pharmacy, &c. By Francis Mohr, Ph. D., &c., and Theophilus Redwood, Professor of Chemistry and Pharmacy to the Pharmaceutical Society. London: Taylor, Walton and Maberly. 1849. 8vo. pp. 390. Numerous wood-cuts.

The Serpentine as it is, and as it ought to be, and the Board of Health as it is, and as it ought to be. By Edward John Tilt, M.D., Physician to the Farringdon General Dispensary and Lying-in Charity, &c. London: Churchill. 1848. 8vo., pp. 67.

TO CORRESPONDENTS.

Communications have been received from Mr. H. Williams; the Sheffield Medical Society; Mr. G. King; the Birmingham Pathological Society; Mr. E. Cam; Mr. E. O. Spooner; Mr. Jennings.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON SURGERY,
DELIVERED IN THE
MEDICAL SCHOOL OF CAMBRIDGE.

By GEORGE MURRAY HUMPHRY, Esq., Downing
College, Surgeon to Addenbrooke's Hospital.

LECTURE I.

Relation of Local Disease to the Constitution; Good Constitution; Constitution enfeebled by Defect or Want of Harmony of great Organs, by impaired or naturally weak State of Assimilative Functions; Varieties of Characters of Disease with Age; Constitution may be benefitted by, or habituated to, Local Disease; Disease, a modification of Nutrition.—Inflammation, reparative and destructive; Changes observed in the former consist in an Exaltation of Natural Forces—may be Healthy or Morbid: Effects of Inflammation vary according as Decay or Reproduction are most accelerated by it.

The state of the patient's constitution, and its relation to the local disease under which he suffers, is so important an object of attention in the study and practice of surgery, that I will commence by a few remarks upon this subject.

That person is said to enjoy a good constitution, in whom each of the great organs of the body does its duty well, and in whom they are all well balanced, and in harmony with each other, the nutritive and assimilative processes throughout the system being conducted vigorously and efficiently, so that repair is equal, or nearly equal, to decay. The man thus happily constituted is able to resist many of the exciting causes of disease, to which others of weaker frame fall victims. His accidental maladies are chiefly of an inflammatory nature. The morbid process, partaking of the active character of his healthy functions, advances rapidly, and is attended with well-marked inflammatory fever, in which all the great organs of the body sympathise equally, and in due proportion to the severity of the local affection. The disease demands, and the patient will bear, active treatment, and the case proceeds quickly to a favourable or fatal termination. The gradual decay of age takes place in its appointed time and manner, obedient to laws originally impressed upon the body, is shared by all the organs alike, and is as natural as their development and advance to maturity.

Such perfection of physical formation is, however,

comparatively rare; very frequently the constitution is weakened by a defect in one or other of the great organs, which may be the result of original imperfection, of too early decay, or it may be the effect of disease. The whole body is, by this fault in one of its parts, rendered more amenable to the influence of disturbing causes, and the impression produced upon the system by a local affection is often, under these circumstances, greatly disproportionate to its severity. We are startled at the rapidly fatal effects of an attack of diarrhoea, or an inflammation of the leg, such as we are accustomed to treat with the assurance of success, but the *post-mortem* examination explains the mystery, by revealing an unsound condition of the heart, an imperfection in its valves, or degeneration of its muscular fibres. In one man, a broken leg is followed by an attack of gout; in another, by jaundice; in a third, by delirium; and in a fourth, by palpitation of the heart, with an intermitting pulse, the effects of the shock calling forth the constitutional predisposition, and telling most upon the weakest organ.

Another cause of constitutional weakness consists not so much in unsoundness of any of the great organs in particular, as in a want of due proportion or harmony between them; one or more preponderating over the others, wearing them out, and giving a peculiar character to the diseases which occur. In the plethoric habit, the circulatory system prevails, and disease is chiefly of an inflammatory nature. A small spark is sufficient to light up the flame, but the accompanying fever is not generally so well marked, of so sthenic a character, nor is depletion so well borne as in the more healthy person.

The predominance of the nervous system is especially shown in the affections occurring in sensitive and hysterical persons. The symptoms are essentially of a nervous character, and the system responds so violently to a slight impression, that a severe fit, with complete insensibility and convulsions, may follow a sudden fright, a slight injury, or an attack of indigestion. The pain attendant on a local inflammatory attack is also more or less disproportionate to the other symptoms, or, perhaps, it lingers on after they have subsided, so as to constitute the entire disease; and a very troublesome disease it often proves, resisting all the ordinary means the surgeon can devise, and yielding, perhaps, at last, to some accident, a blow, or strong mental impression.

The hysterical affections of joints are good examples of this class of complaints. A young woman suffered under acute pain, and exquisite tenderness of the ankle-joint, which had continued for months, rather aggravated by the leeches, blisters, and other means employed for her relief. Her health was not much impaired, and there were no appreciable signs of disease in the joint, no swelling, heat, nor crepitation. I spoke to her in a very decided manner, desiring her to leave her bed, and move about the ward. In two days she was walking about, and soon after was discharged from the Hospital. She walked a little lame for a long time, and now (more than two years since she left the Hospital,) she feels weakness, and some uneasiness in the joint, when the weather changes. I do not wish to persuade you that there is actually no disease in cases of this kind, for I believe that there generally is some slight inflammatory condition of the joint or limb, though it is by no means proportionate to the pain and tenderness complained of. It is no very easy matter to assign a true value to the symptoms which are conveyed to us by the expressions of the patient; and as, on the one hand, undue importance is often attached to the local affection of a sensitive patient, so, on the other, I have frequently known the existence of real disease to pass unnoticed, or to be discredited, because the pain and accompanying nervous symptoms were extreme, or of an hysterical character.

The sense of pain often becomes more acute, and the ability to control the emotions less strong, when the system has been weakened by protracted illness and much suffering. Under these circumstances we sometimes witness strange nervous symptoms and hysterical attacks, in persons who had not previously shown any disposition of the kind.

In like manner the pain experienced during an operation, and the effects of the shock upon the system, vary greatly with the nervous susceptibility of the patient; and it is one of the great advantages of anæsthetic agents, that their influence is most easily and certainly induced in delicate and sensitive persons, or in patients who have been weakened by long protracted disease, those very cases in which the pain and shock of an operation are most to be dreaded.

An impaired condition of the assimilative functions, primary or secondary, or both, is also one of the most common causes of constitutional debility, and is a very fertile source of local disease. To instance one class of cases of this kind:—There are many persons who are unconscious of any particular ailment, perhaps are not aware that they suffer from indigestion, have good appetite, and are capable of exertion; but their complexion is not clear, the tongue is habitually white, and the urine high coloured and thick; they perspire easily, or suffer under frequent attacks of diarrhoea. The disorder is not necessarily confined to the stomach and chylipoietic system in particular, but may be diffused over the whole process of digestion, from its commencement in the mouth to its completion in the blood, so that crude or imperfectly-assimilated materials find their way into the circulation, and pass off by the skin, the kidneys, or the bowels, or give rise to a disordered

state of the nutritive processes generally. Such a condition is likely to be induced by long-continued intemperance in eating or drinking, by sedentary occupations, by over anxiety, late hours, &c. You will find that a large proportion of gouty affections, sore legs, boils, diseases of the cellular tissue, and a variety of local ailments, are associated with some such disorder of the alimentary system. Hence the paramount importance of general therapeutical treatment in cases of this kind, particularly attention to diet, which is the more necessary to enforce, because the patients do not always suffer the direct symptoms of indigestion referable to the stomach.

Here I would, in passing, just warn you against running into the extreme of attaching too much importance to the stomach and digestive system, to the entire neglect of the local disease. A person suffers the symptoms of slight inflammation of the bladder, which is observed to vary with the state of the stomach, and to be so constantly aggravated by indiscretion in diet, that the friends encourage the idea of the affection being "all stomach;" and the surgeon is induced to express the same opinion, which he regrets having done when the local disease, assuming more importance, is less influenced by accidental causes. A more careful consideration of the case would have informed him that, though the symptoms referable to the bladder were greatly influenced by the state of the digestive system, their existence under any circumstances was an evidence of disease, or disposition to disease, in the organ itself.

When the assimilative processes throughout the system are habitually conducted in a feeble, rather than a disordered manner, slight inflammatory affections are of frequent occurrence, which are languid in their progress, and difficult to cure. Of this state of constitution, and the character of the diseases to which it is liable, I shall speak more at length when describing the pathology of scrofula.

I must not omit to mention a few of the peculiarities of disease dependent on the time of life at which it occurs. The thread of life, strongest in the middle, tapers at either end; and in the infant and old man a very little will suffice to snap it. In the adult the vital powers are greatest, and the characteristics of the morbid processes most fully developed; the descriptions of pathology and rules of treatment are, therefore, usually to be understood to relate to that period of life, unless it be otherwise expressed.

The fine soft delicate frame of the child is peculiarly susceptible of disease, which may be easily communicated to it by contagion or atmospheric influence. The nervous system, in advance of the rest of the body in regard to its development, is highly sensitive; and a slight amount of local irritation, or the commencing stage of inflammation, is attended with great constitutional excitement, so that, judging from the high fever, the quick pulse, hot skin, and furred tongue, we may easily fall into the error of over-estimating the severity of the local affection, and of being over-active in its treatment. The rapidity and violence with which the nervous system sympathises with a local disorder, render slight complaints, such as teething, of serious

importance. Indeed, children often die of the constitutional disturbance, before the local disease has sufficiently advanced to leave any traces discoverable on a *post-mortem* examination. Hence it is, that in a very considerable proportion of the autopsies of infants all the organs appear to be perfectly sound, and we are at a loss to assign the cause of death, if we have not been acquainted with the symptoms that existed during life. Hence it is, too, that children often recover, and recover rapidly, from the most alarming attacks, when the slight cause which occasioned them has passed away. This high nervous sensibility, and disposition to acute sympathetic disturbance, furnishes an important indication of treatment in the diseases of children,—viz., that remedies should be directed to meet the tendency to excitement at the same time that measures are taken to remove the exciting cause. The necessity of adopting this plan more largely, of resorting to the cautious employment of sedatives, and of depleting less actively, is daily becoming more felt.

It should be remembered, too, that children are easily depressed as well as excited;—that they bear depletion ill, and recover slowly from its effects;—the amount of fibrine contained in their blood is comparatively small;—their textures are delicate, and yield quickly to the destructive effects of disease.

Nevertheless, it is to be remarked, that their reparative powers after injuries are great, provided they rally from the effects of the shock, and provided there has not been much loss of blood. The inflammation which follows has a disposition to stop short in the reparative stage, and does not so commonly run on to the destructive stages as in the later periods of life. It may strike you that burns form an exception to this statement; but the fatal result which so commonly follows in these cases is, for the most part, due to the continued depressing influence of an extensive injury of the skin. The children either die of the direct shock, or rally but imperfectly, linger in an enfeebled state, so that they are easily influenced by the exciting causes of disease, and a slight attack carries them off.

The peculiar features of the diseases of old age are, in great measure, owing to the failing vital powers of the whole system, and of those organs more particularly which happen to have been gifted with less endurance than the rest. There is not much scope for treatment, and the old man often shews an instinctive aversion to medicine. The inflammatory affections of this second childhood may, in many respects, be contrasted with those of infancy. The dry harsh frame of the old man is much less susceptible of atmospheric influences and contagion than the delicate system of the child; but it suffers more severely from injuries, for the reparative powers are feeble, and the inflammation induced in this or other ways soon passes on to the destructive stages of ulceration or mortification. The constitutional symptoms of inflammation are rather those of depression and exhaustion than of excitement; the fever is of low type, attended with dry brown tongue, quick soft intermitting pulse, muttering delirium, and so on. Depletion is ill borne: soothing and supporting measures are required. The old man, like the child, is easily prostrated by the onset of disease, and

often dies in the very first stage of an attack. Perhaps he is found dead in his bed, having yielded without struggle enough either to have furnished any premonitory symptoms of immediate dissolution, or to have enabled the disease to affix discoverable marks of its existence to any particular organ.

As a general rule it may be assumed, that the existence of local disease is prejudicial to the general health of the patient. But even this statement admits of some exceptions. For instance, a person who has been suffering general indisposition for some months, is greatly relieved by the appearance of a cutaneous eruption or a sore leg; and the sudden suppression of the external malady would in all probability be followed by the occurrence of some more dangerous internal disease. Again, a healthy man becomes the subject of an ulcerated leg in consequence of a blow, a compound fracture, or other accidental cause. In course of time the system becomes so habituated to the disease, that its removal is followed by sinking at the epigastrium, sense of fulness of the head, or even apoplexy. Remarkable examples of this kind are related in the case of persons who had so long suffered from the stimulus of pain caused by stone in the bladder, that the loss of the stone, like that of an habitual dram, was followed by prostration of strength, and some other stimulus was required to supply its place. It is an humbling reflection that we cannot always boast even of our cures; and unless we are in the habit of attending closely to the relation which local diseases bear to the constitution, our patients will often have reason to regret the application of our successful but ill-timed measures.

I would advise you, before commencing the study of pathology, to make yourselves well acquainted with the information on the subject of nutrition contained in modern works on physiology. For you must know that disease is but a modification of the ordinary or natural processes of nutrition; and the extension of disease from one part of the body to another is, probably, no more than a result of assimilative operations, similar to those by which the textures grow and are repaired. In the simple diseases, such as inflammation, the morbid process seems to assimilate to itself, or alter, the healthy nutritive forces of adjacent parts, impresses its peculiar character upon them, and so spreads by radiation from a single point, till the whole system is involved in it. In the specific diseases the same influence is still more remarkable. A cancerous tubercle spreads by the assimilation to itself of the neighbouring structures, which it effects so completely that the natural texture of the part is lost, and the new formation occupies its place. There is, as it were an incessant conflict between the assimilative influence of the disease and the natural forces of nutrition; and the former spreads in proportion as its own energy is great, or the resistance of the tissues to its progress is feeble. Thus cancerous tumours are often first observed when the patient's strength has been lowered by illness, anxiety, or other cause; they grow with increasing rapidity as the powers of the system give way, and in the latter periods of the illness they are propagated to distant parts, which had hitherto

held out against them. In the tertiary stages of syphilis, the increase of the malady and the strength of the patient are often found to alternate with one another, and when our specific remedies have lost their effect, we are content to endeavour, by improving the general health, to keep the disease in check.

Having made these few general remarks for the purpose of directing your attention to the important subjects referred to, I will at once proceed to consider the process of inflammation, which will occupy much of our time, because, in one or other of its stages, it is the source of a very large proportion of the diseases afflicting the body, besides being, at some time or other, more or less intimately associated with nearly all those morbid conditions which do not directly originate in it. It is also frequently much under the influence of treatment, preventive as well as curative; and it presents further claims to our favourable consideration, on account of its being one of the means by which solutions of continuity, occasioned by injury or disease, are repaired, and the integrity of the body preserved. We have, therefore, to consider the reparative no less than the destructive effects of inflammation. We may complain that by its severe attacks the textures are mutilated, and softening, ulceration and mortification engendered; but we must not forget that it carries the balm of healing with it, or that by its milder influences abscesses are opened, ulcers closed, and dead parts detached,—that wounds are healed and fractures united. I am aware that on this point—the threshold of surgical pathology, you will meet with much disputation. You will find one eminent writer upholding inflammation as the great safeguard against the injurious effects of wounds, and stating that without it the lancet prick in venesection would be fatal; while another takes quite an opposite view, sees only its destructive effects, and will admit it to have no share whatever in the salutary processes of reparation.

These contradictory statements are the expressions of opinions in reality less at variance than they appear to be, and result from the different limits assigned to inflammation by the respective authors, rather than from their views of the real nature of the process being so greatly opposed. They may, I think, be reconciled without compromising the opinions of either party, if we will only admit that there are, in inflammation, two chief stages, so dissimilar in their effects that they would scarcely seem to belong to the same process, yet so closely allied in their nature that it is difficult to point out the characteristic marks which distinguish them; and they pass into one another so frequently and insensibly, that the difference is clearly one of degree rather than of kind. These we will distinguish as the reparative and destructive stages of inflammation, and will proceed to the consideration of the former.

In the ordinary state of the circulation, the blood moves through the capillaries in a gentle equable stream, propelled by the force of the heart's action, which has been modified by the elastic influence of the large arteries, and is assisted by the contractile power of the smaller vessels. The red corpuscles float along

in the middle of the current, showing little disposition to adhere together, or to the walls of the vessels; whereas, the white corpuscles, which are of lighter specific gravity, occupy the exterior of the stream, travel less rapidly, and are often seen resting for a time against the sides of the tubes. The fluid elements of the blood soak through the walls of the vessels, permeate the surrounding tissues, and become subservient to their nutrition. The small vessels possess, besides, a certain distributive power over the blood, independent of the central organ, whereby they are able to regulate the local circulation in obedience to the necessities of the part; so that if any particular organ be used more than the others, its supply of blood may be increased without disturbing the general circulation. It is probable, too, that they exert some control over the quantity and quality of the liquor sanguinis which is filtered through their walls for the nourishment of the adjacent structures.

The simplest deviation from the ordinary condition of the circulation in a part, is that which is brought about to make amends for the extraordinary wear and tear consequent upon unusual activity of function, and consists in an increased action of the small vessels. "*Ubi stimulus ibi fluxus.*" The sense of fullness and heat of head after intense application, indicates that the vessels of the brain are busily employed in supplying the materials for active nutrition. They are dilated beyond their usual size, and the blood is passing more rapidly through them. The organ is in a state of active congestion. A similar change occurs in the neighbourhood of a healing wound or ulcer, in obedience to the extraordinary demand made upon the circulatory and nutritive powers, for the purpose of effecting the reparative processes; and the enlarged tortuous arteries of the pregnant uterus, are the result of the same condition long continued. This increase of energy and activity is not confined to the small vessels, it extends in like degree to the blood flowing through them. The several stages of cell-formation are completed more rapidly, the corpuscles are seen to accumulate in greater numbers, and their products, more particularly the fibrin, are proportionately increased and endued with higher powers of organization, so as to suffice not merely for the nutrition of wearing tissues, but also for the formation of new structures in the place of those which had been destroyed; or for the development and growth of a new being. In like manner these changes may be communicated from the part to the whole system, from the blood flowing through the excited capillaries to that circulating in other regions, and from the minute vessels to the heart. The state of the circulation and of the blood in the pregnant female, and the rapidity and force of the heart's action, together with the general heat of the body occasioned by unusual exertion, are familiar instances of this.

Such a condition, affecting a part or the whole system, we will call the first or reparative stage of inflammation, which is to be understood, therefore, as consisting simply in an exaltation of the ordinary forces of circulation and nutrition, occasioned by an unusual demand upon them, and taking place in

consequence of unusual exertion, or to effect some reparative process. It results from a natural stimulus, involves the several parts concerned in nutrition—the blood, the vessels, and the textures, in due proportionate degree, and is to be regarded as no other than a healthy and orderly action.

It may seem an inconsistency to apply a term usually expressive of disease to a process so salutary, and, indeed, essential to the preservation of the body, as I have described this to be; but I do so for the purpose of impressing upon you, at this the starting point of pathological investigation, that there are no broad lines of demarcation between healthy and morbid processes,—that they pass into one another by insensible gradations,—and that the same process may be healthy or morbid, according to the circumstances under which it occurs.

This reparative stage of inflammation borders very closely upon, and may even of itself constitute, disease. It does so when it exists without any definite end to be attained,—when there is no increased activity of function,—no wound or ulcer to be healed. Under such circumstances it is an injurious process, a morbid congestion, and may give rise to exuberant or unhealthy nutrition, to hypertrophies, warts, and such like structural alterations, to which effects we shall subsequently recur. Or, commencing in a natural manner, and for a desirable purpose, it may easily exceed its normal bounds as a reparative process, and pass on to that which I have called the second or destructive stages of inflammation.

The application of an extraneous stimulus or irritant is attended with precisely the same results as the natural stimulus of increased function; both occasion the same state of active congestion, the same excited condition of vessels, the same accumulation and rapid formation of globules; and the term which is applied to the altered condition in the one instance, should be retained in the other, though the circumstances under which they occur, and the ends accomplished by them, may differ.

This state of active congestion is readily produced, and may be seen by irritating the transparent membrane of a frog, or other animal, under the microscope. The orderly progress of the blood is seen to be disturbed, the corpuscles hurry about confusedly from point to point, the vessels become dilated, the blood continues to pass rapidly through them, and there is a considerable afflux of blood to the part. Blushing, and the red circle you have, doubtless, often observed round the place where you have been making a caustic issue, are instances of the same.

I must, however, tell you that some pathologists, arguing rather from probabilities than from the observation of facts, are strenuously opposed to a belief in the state of active congestion, such as I have described it to you. They regard the process of inflammation in all its stages, as consisting in a relaxed or paralysed condition of vessels, accompanied by a retardation of the current of blood in them. We may not, it is true, be able to explain, by physical laws, in what manner dilatation and accelerated circulation can be contemporaneously effected in the same vessels,

any more than we can understand how the minute vessels assist in the circulation at all; but the general appearance of the inflamed part, the bright red colour, the additional heat, the thumping arteries, and the turgid veins, are sufficient evidence that such is really the case, exclusive of the more direct proof furnished by microscopical observation. There is no difficulty in conceiving that such a condition results from an exaltation of that distributive power resident in the vessels of each particular part, which is generally allowed to exist; active congestion, in short, consists in nothing more than an increased energy of circulation, of the same kind as that which must be of continued occurrence in each organ to meet its varying function. I do not think the objectors to this view have ever given a satisfactory explanation of the turgid state of the veins of an inflamed limb, or of the fact that an increased quantity of blood passes through them, which has been shown by the experiment made by Mr. Lawrence, of opening corresponding veins in both arms in a case of inflammation of one hand, the flow of blood being in the fullest stream from the inflamed limb.

One of John Hunter's experiments illustrates this dilatation of the vessels. Having excited inflammation in one ear of a rabbit, and injected the head from the aorta, he found the arteries of the inflamed ear enlarged one-third beyond their natural size, and arteries were injected in it which had no visible counterpart in the other ear. The enlarged vessels admitting injection more freely, or a greater number of red corpuscles than usual, have led persons to think that new vessels are actually formed in a part during inflammation. This, however, appears very rarely to take place.

It seems probable that the analogy between active congestion, when existing as a disease, and that occurring as a natural phenomenon, in consequence of increased function, is not confined to the condition of the blood of the vessels, but that it may be extended also to the changes which take place in the tissues; for the delay and reproduction of particles appear to be accelerated under both circumstances, in the one as a cause, and in the other as a result, of the process. Parts not unfrequently become hypertrophied, as I have already mentioned, and the researches of Dr. Bence Jones show, that the excretion by the kidneys, of large quantities of phosphate of lime, is a frequent occurrence in the early stages of inflammation of the brain, the same salt being also in excess after great mental exertion.

As we proceed with the subject of inflammation, we shall find that its effects upon the tissues vary according to the proportion in which it influences the decay or the reproduction of their particles; and that its effects are on the whole most manifest on the structures whose transmutation of particles is most rapid. In the early or reparative stage, reproduction is in excess, giving rise to the healing of wounds, or the increase of hypertrophies. In the later stages the accelerated decay and dissolution of atoms is not counterbalanced by a corresponding rapidity of reproduction; on the contrary, nutritive processes both in the blood and in the tissues are alike impaired or disordered, and as

a consequence of these two effects,—increased decay and impaired nutrition, the various destructive results of inflammation, atrophy, softening, interstitial absorption, ulceration, and mortification, are engendered.

THE

CONTAGION OF ASIATIC CHOLERA.

By E. O. SPOONER, Esq., Blandford.

It is now more than three months since the pestilential cholera has been reported among us. Has it swept over the land as an atmospheric influenza? Has it followed any definite track of the wind, or any regular direction of the compass? Has it been attended with any new or unusual atmospheric phenomena? Has it followed any geological formation, or mineralogical peculiarities? From the tertiaries of the London bason, up to the granitic series of Edinburgh, it has appeared with strict impartiality. It lurked about in the fine weather of October, in the wet month of November, and at Christmas it was reported at Belfast, in Ireland, having taken ship from Glasgow. On board one of the emigrant ships from Bremen, it has crossed the Atlantic to New York. All the western ports of our island, however, and all the Channel harbours, have been free from invasion. *They have no extensive trade with Riga, Hamburg, or any of the northern pest ports.*

More than three months ago we were told on authority that it might at any time be expected to jump out of any uncleaned cesspool, or undrained ditch; all our villagers' pigs were forthwith ordered to be killed, for pigs and pigsties were voted "nuisances." Like the fabled "wandering Jew," this swarthy Asiatic was said to be out on his travels through the land, and that he took lodgings in these appropriate localities. Ditches and cesspools are quite as common at Liverpool as at Leith; quite as numerous at Bristol as at Hull; yet, neither Liverpool nor Bristol have yet reported any cases, notwithstanding the stringency with which reports are hunted after, and although three months have elapsed since Hull received her first importation. The shipping of Liverpool and Bristol rivals that of London and Leith, but the shipping all arrive with *clean bills of health from ports not yet contaminated with cholera contagion.*

The *secondary spread of the pestilence* which is now begun will be marked by the appearance of cases at these western ports, as well as some of our inland towns, which are unfortunate enough to receive many infected tramps.

Verbal quibbles about the meaning of contagion are worse than useless. Our great lexicographer defines contagion by the term infection. The terms are synonymous, for he equally defines infection by the word contagion. Contagious matter is either liquid,

as in the small-pox vesicle, or solid, as in the dried pustule, or it may become diffusible in the aqueous vapour of the atmosphere. It then assumes the miasmatic state. The emanations from the bodies of the sick are of this atmospheric character, and consequently become the sport of the winds, or remain hovering like a mist, when the air is stagnant or loaded with moisture. When the temperature favours decomposition or putrefaction, nearly all contagious increase in virulence. Syphilitic contagion appears never to spread atmospherically, though it must decompose, of course, as do all animal poisons. The poison of scarlatina, on the contrary, is highly diffusible; *such appears to be the case with pestilential cholera.*

The contagion of this Asiatic scourge has now for many years been a fruitful topic of controversy in medical fraternities. Among the early practitioners of India who witnessed the first outbreak and successive ravages of this new plague in Hindostan, the analogies of the disease, to the more violent forms of the simple cholera, so accurately described by Sydenham, and ascribed by him to the atmospheric and epidemic conditions of the autumnal season, led them to lose sight of *the specific character of the new disease*, which was at length discovered to be so completely *sui generis*, as to deserve a more diagnostic name than that which they have given to it.

Looking upon it only as a climatorial development of the same disease, in a more aggravated form, they were content to call the one *English*, and the other *Indian*, cholera.

No doubt India had often suffered from epidemic visitations of ordinary cholera, as England and other climates had done. The abundance of the fruit season, and the excessive temperature of the Indian summer, produced the common cholera of milder climates in an endemic form, and they were accustomed, before 1817, to observe occasionally the vomiting, the purging, the cramps, the collapse, and the death of many who were seized.

But the occurrence of the new disease, *during all the seasons of the year*, taking a definite course, with a far more fearful mortality, defying the ordinary therapeutic means with which they were accustomed so successfully to combat its prototype, presenting to accurate investigation some new symptoms of a marked character, at last opened their eyes to that ever recurring enemy which, since 1817, they have had to meet, *in some quarter or other, in every season of the year.* It was as natural for them at first sight to imagine such a peculiar disease free from the principle of contagion, as it would have been, had it been an indigestion or liver complaint. There was no visible eruption of any morbid product on the surface of the body, as in small-pox, or measles, or scarlatina. Many of those who were in close communication with the sick, either entirely escaped, or suffered *but slightly*

the symptom of *diarrhœa*, which they never presumed to call an *attack of cholera*, so that at first sight the conclusion was almost universal that cholera was uncontagious. Kennedy, who so graphically describes the new disease, says, even in 1818, the year after its first appearance in Jessore, "month after month, during the preceding year, fresh accounts reached us of its progress westwards, and the general alarm and horror were excited to the utmost when every hope that the disease might *terminate with each change of season was at last extinct*." The season merely influenced the virulence of the disease, as it influences other diffusible contagions. The morbid material, whatever it was, survived the winter only to break forth with renovated vigour in the warmer weather; and a population of a hundred millions, notorious for their migrations and their festivals, ever presented a sufficient number of victims to be annually sacrificed to this new enemy of the human race. They were not a drunken and dirty people, for their religion was diametrically opposed to such habits, but they are principally vegetable feeders, rice being their chief article of diet, and they live a large portion of their time in the open air.

In examining the question of the contagion of cholera, we must ever bear in mind, that even could it be put to the test of inoculation, which has not hitherto been successfully accomplished, and thus obtain for it the direct demonstration of its infectious property, as we have found in small-pox, that *many cases must arise after it has once appeared in any country which cannot be traced up to any known communication with the infected*. Dr. Gregory, who has paid so much attention to the subject of small-pox, declares that nineteen out of every twenty persons received at the Small-pox Hospital, are unable to discover the source of their infection. They imagine they breed the disease; they attribute it to a chill, or to excessive fatigue, or to getting wet, or to a hundred other very innocent causes, rather than its true one—infection—of which they are unconscious. The difficulty sometimes found in tracing an infectious disease up to its true sources, does no more invalidate the doctrine of contagion than would a hundred undetected larcenies lead us to suppose that they could be committed without the thief.

The analogy of the new disease lately introduced among the sheep of this country, may suggest to us a parity of reasoning respecting the cholera. The very Merino sheep which first brought the "*variola ovina*" into England, have been clearly detected. The disease, however, has now appeared in so many of our counties, that the links in the chain of infection become extremely difficult to trace, and it often *now* arises without any previous communication with infected flocks,—the atmosphere appearing to be the vehicle of the contagion. *Thus it is with cholera.*

When a small island becomes the seat of a new disease, as when Iceland, in 1707, was first seized with the small-pox; or Malta, after an absence of more than a hundred years, with the plague in 1813, or the cholera in 1837, the important question—"whence comest thou?" is put with some probability of a satisfactory answer to the new visitant. The identical ship by which it is imported becomes easy to recognize, and the earlier steps of the invader are tracked with considerable accuracy, until the multiplied secondary or tertiary sources of contagion baffle further inquiry, and the original thread becomes in "wandering mazes lost."

In continental countries it becomes more difficult to bring these inquiries within so small a compass; and in our own island, whose numerous ports are filled with the shipping of all nations, such floating arks of pestilence may, like the Cronstadt vessel lately mentioned by Dr. Simpson, infect the pilots of Newhaven, sail out of port, and baffle for a considerable time the most diligent inquiry. So numerous are the flags that daily and hourly enter our harbours and roadsteads, that supposing cholera to arise from contagious or infectious emanations, we must within the last three months of unrestricted intercourse with Hamburgh, Riga, and Cronstadt, where the cholera had been raging previously, have received many of these foci of contagion; and yet, notwithstanding the "*suppressio veri*," and the "*suggestio falsi*," which have been used pretty freely, there is enough evidence for us to ground a pretty strong case against these northern vessels.

Sailors, it may be, very opportunely eat voraciously of plums and drink sour beer, or some convenient cesspool is at hand in every locality, to bear the blame. The bilge water, too, is another prolific source on ship-board, or some want of cleanliness is perhaps pointed out by some inspector who sees great negligence in the sanitary arrangements on board nearly all the coasters. As for contagion, Dr. Parkes puts on his spectacles and says he never saw it cross the lines at Moulmein or Tenasserim. Mr. Grainger says the medical men of Hamburgh pooh, pooh! at such a silly idea; and that they have very diligently dissected the dead bodies for it, and cannot find it. Alas! that men should ever be employing their external senses and their powers of observation, and should so entirely omit to exercise the reasoning faculty, by which alone invisible agency is proved to exist. Gravitation is not less a property of matter, though it is essentially invisible, and is ever undistinguishable save to the eye of reason. In the hands of Newton, it solved the problems of planetary motion, and the irregularities of celestial bodies were all found, not indeed exceptions, but legitimate consequences of this general law, when deeply investigated.

There cannot be the slightest doubt about the propriety of those sanitary improvements, which have been so strongly recommended, but to assume that

a disease is non-contagious, because cleanliness and ventilation mitigate its severity, and sometimes disarm its concentrated potency, is illogical. A disease cannot be *contingently contagious*, though it may spread or not according to certain contingencies. The theory of a disease being sometimes contagious and sometimes not, is self-contradictory and absurd. Similar kinds of matter always possess similar properties, and the specific virus of the choleric pestilence forms no exception to the general rule.

It is sometimes said that cholera is not contagious, because it is not attended with an eruption like the exanthemata. To this we would reply that all *a priori* reasoning of this kind is scarcely allowable when we have the positive facts to determine the question. Let us however, for a moment, examine the point as if no such positive evidence were within our reach;—as if no basis for inductive reasoning existed;—and as if we were thrown altogether (which is far from being the fact,) upon the mere analogies of other diseases to draw our inferences. “In cholera,” say our Sanitary Commissioners, “no vitiated secretions occur.” All epidemic diseases commonly regarded as contagious are diseases of excitement, during which inordinate actions the fluids of the body become vitiated, and the excretions often so highly offensive, that they appear to possess a septic or putrefactive tendency. “In cholera,” they state further, “there is no power to generate poison, and no activity in the excretory apparatus to throw it off.” Now, it may be true, that in some rare cases of sudden and early collapse, the secretions may appear suspended,—*collapse, however, is not cholera*, it is only one of its occasional symptoms, and it occurs now and then at the onset of other diseases, as in scarlatina and typhus, and may terminate in death or be followed by the stage of reaction and excitement. Some writers, as Dr. Billing, define cholera as a fever, of which collapse is an early and frequent symptom. Others, as Dr. Bell, call it an ague; and Dr. Dickson, with perhaps as much correctness, calls all diseases agues, because they are attended with intermissions and exacerbations. We prefer the view of Dr. Billing; and if cholera be a specific fever, what becomes of the loose statements of our Sanitary Commissioners? If we require morbid secretions, have we not in the premonitory diarrhoea and in the rice-water evacuations, quite sufficient evidence, that in the internal lining membrane of the intestinal canal, there has existed enough of “excitement,” “increased action,” and “morbid secretions,” in abundance? Our Commissioners seem to have forgotten, that the Germans long ago have discovered in the fæcal evacuations the *broken-down epithelial cells* of the small intestines. The debris of these cells, cast off by a species of *internal desquamation*, afford ample evidence of violent excitement, and remind us of those external diseases denominated exanthemata,

such as scarlatina, in which the cuticle so completely desquamates, and becomes sources of contagion.

Henle, in his “Retrospect of Pathology,” published in Müller’s *Archiv.*, 1839, gives an admirable account of the pathological researches of Böhm. A translation of this analysis is published in the *Medical Gazette* of November 22nd, 1839, from which I extract a few passages, recommending those interested in the inquiry to the original document.

“In the contents of the intestines of cholera-patients, Böhm has discovered the debris of the epithelium of the mucous membrane of the digestive canal, and he hence refers the phenomena of the disease to a morbidly accelerated process of desquamation from the membrane, which he has accurately traced through its several stages. The affection of the internal membrane of the digestive canal is not equal in its several parts; the stomach suffers little, and the large intestines least of all; it is the *small intestine, which is for the most part attacked throughout its whole length*.

“After the destruction of the cuticle, and when a raw surface remains, the destruction goes on in the very substance of the mucous membrane. The villi become thinner and weaker by a kind of maceration, their swollen free extremities split up, and assume a fibrous appearance, by the increase of which they are gradually cleft to their bases. The intestines thus affected, in irregular scattered spots, look like an old hide from which the hair is in part worn off. The extremest degree of destruction is found at the end of the ileum, where the Peyerian glands perish, and the mucous membrane is converted into a cracked and broken-up surface; but the whole process is effected with such rapidity, that patients, who in the morning complained of at most an uneasy moving of the intestines, and who die at noon, already present at their *post-mortem* examination a considerable destruction of the mucous membrane. It is the fragments of the epithelium, which, mixed with the effused fluids, form the contents of the intestines. If the latter remain for a certain time at rest in a glass, their microscopic constituents will sink to the bottom. The contents of the intestines appear milky when the *quantity of secretion* is considerable in proportion to that of the elements of the epithelium, and the latter are very minutely divided. They are pus-like, or cream-like, when, on the contrary, the quantity of fluid is small in proportion to that of the solid constituents; flocculent when the epithelial cells are still connected in considerable masses; rice-water-like when similar flocculi float in smaller numbers in a turbid fluid; gruel-like when larger portions of the epithelium (some of a white and others of a greyish-green colour,) are mixed with one another, and connected by a scanty secretion into a mass of a pulpy consistence.”

Böhm has abstained from all conjectures on the nature of the process which he has thus accurately

followed in all its phenomena. But the process by which the epithelium of the intestines is removed, has the greatest analogy to the formation of vesications; and Böhm has himself, in many places, compared the one with the other. The cause of desquamation is a mechanical and passive separation of the cuticle by the exudation, and the exudation is the essential part of the disease. This may be produced in two ways,—either by a primary general alteration of the blood, by which it becomes thinner, or by a local stagnation and change of it by a process which *we name inflammation*. The first is improbable, because the process is *limited to the intestinal canal*, although the inner surface of the lungs and other organs is not less delicately formed. For the second view, the symptoms of the disease and other morbid appearances which Böhm found after death, are all favourable: as for instance, the injection of the vessels which is constantly coincident with the desquamation,—the tinging of the whole substance of the villi with blood,—the presence of fibrinous coagula in the effused fluid,—and the exudation of plastic lymph on the outer surface of the mucous membrane, in the region of the Brunnerian and Peyerian glands. All the secondary symptoms of cholera are explained by the great loss of serum which takes place so rapidly from the walls of the intestines, from the alteration of the blood thereby produced, and from the extended affection of the nerves of the internal surfaces. These circumstances do not act differently from a *burn*, which is attended with blisters over the whole surface of the body.

We think it highly probable that these *morbid cells generate the specific poison of the cholera*; and the fact of a camp thus contaminating those who are within the circle of the fecal evacuations, (*not from ordinary putrefaction and decomposition which does not produce Asiatic cholera*;) re-infecting those who shortly afterwards occupy the same position, connected as it has often been with the additional fact of the cessation of the disease on frequent removals of bodies of men into new and uncontaminated districts, all seem to corroborate the inference we draw from *an undisputed pathological phenomenon*. We are fortified in this view, too, by the acknowledged danger of a residence near the mouths of sewers, when the disease has once made its appearance; and the great fatality and frequency of the disease in those cities where dirty privies are situated within the houses,—as in Paris, where the first, second, third, fourth, fifth, and even sixth floors has a foul nest of contagion of this character, and where the habits of the people are so devoid of cleanliness in this particular. I lived in Paris the year before the cholera broke out; it was then dangerous to walk in many of the narrow streets at night, lest something filthy coming down from an upper story should assail you. As for French privies no Englishman could use them, but willingly paid two *sous* for a “*cabinet d’aisance* a

l’Anglais.” I hope Glasgow does not offer another example of this character, but not having resided there, I am unable to state whether such facts as I witnessed in Paris may not account for the great fatality of cholera in some towns of Scotland.

The French live more upon vegetable diet than the English, and hence, probably, are more susceptible of the malignant form of cholera. Comparative anatomy teaches us that the development of the intestinal tube depends upon the nature of the nourishment. Animals which feed on vegetables require greater powers of assimilation, and have a much larger and longer digestive apparatus than those which are carnivorous. The difference in the length and diameter of the intestinal convolutions of the dog and the horse is immense. We have no doubt that the Hindoo, feeding wholly on rice and vegetables, has more amply-developed *small intestines* than the flesh-eating European, and hence a larger surface becomes exposed to a disease which seems to concentrate its morbid action upon this doubly-worked and highly-sensitive mucous membrane. The soup-fed and water-drinking children at Tooting, approximate in their susceptibilities to that of the Hindoos; their crowded state *concentrated the contagion*, and hence the mortality at which we have all shuddered.

(To be continued.)

SHORT NOTES ON THE OPINIONS AND PRACTICE OF THE LATE JOHN PEARSON, ESQ., F.R.S., ON SYPHILITIC DISEASE.*

By W. S. OKE, M.D., Physician to the Royal South Hants Infirmary.

Dysuria Vesicalis.—This term comprises those diseases of the urinary passages, where the urine is voided with pain and difficulty, in small quantities, and with frequent desire.

1. *Strangury*.—This often arises from the use of acrid aliments and medicines, especially cantharides; and also from exposure to cold after the body has been much heated. When it proceeds from these causes, it may generally be removed by large quantities of diluting drinks,—by opium, soothing enemata, emulsions, &c. When brought on by riding on horseback, a tea-spoonful of the sweet spirit of nitre will often give relief.

It often occurs as the result of ischuria, the bladder becoming as intolerant of the stimulus of the urine as before it was insensible to it. This will generally subside without remedies. In strangury from this cause, after opening the bowels, it is customary to give camphor, the mucilage of gum-arabic, &c., but without much benefit. The best method is to give bark freely,

* Concluded from page 661 of last Volume.

after a purgative, which will generally be found to give relief.

Strangury is not an unfrequent consequence of gonorrhœa, the patient feeling a frequent inclination to void his urine, and passing it with uneasiness. In this case the infusion of *uva ursi*, hemlock, and bark, may be given with advantage, but the remedy mostly to be depended upon is opium, combined with small doses of the diacetate of lead.

2. *Irritability of the Bladder*.—This may arise from three causes:—1st. From simple increased mobility of the muscular fibres, producing painful efforts to void the urine. To relieve an irritable bladder from this cause, the *uva ursi* may be given; and relief will often be observed by passing a bougie a few inches into the urethra, or a very fine bougie into the bladder. Should these means not succeed, a blister may be applied to the sacrum, and the catheter occasionally introduced. Half a grain of the lytta powder will often be found useful, taken three times a-day. 2nd. Irritability of the bladder may be the result of a suppressed gonorrhœal discharge, or metastatic gout. In the former case the indication will be to bring back the urethral discharge, which will best be effected by introducing a bougie into the urethra, smeared, if necessary, with some irritating matter. Should this means fail of such an effect, benefit will probably be derived by blistering the glans penis, and producing an external discharge. When irritability of the bladder takes place from misplaced gout, there is a discharge from the urethra, more or less, like gleet; and in almost all cases of strangury, flocculent matter will be found floating in the urine. Here the object is to bring on a fit of the gout, but in what way this is to be done it is not easy to explain; and the most probable means of producing it, such as plunges into cold water, cannot be adopted with safety. 3rd. Irritable bladder may arise from an abrasion of the mucous surface. In this case thickening and ulceration are to be apprehended, and when this result has taken place, a mucous or puriform fluid is discharged with the urine. Large doses of the balsam of copaiba—as a drachm three times a-day—will be attended with most benefit; and should any blood be mixed with the urine, then, in addition to the copaiba, a glyster of the *Infusum Lini* and laudanum may be thrown up the rectum; but when thickening has taken place, medicines will only alleviate pain, and the best of them all is opium.

Hæmaturia.—Hæmaturia occasionally arises from general or partial plethora, particularly from a turgid state of the veins about the neck of the bladder, when the patient voids a pint or more of blood after exercise, and without pain. It sometimes occurs from the sudden contraction of the bladder upon the end of the catheter, when introduced to draw off the urine. At other times it is the result of inflammation of the bladder, where

previous disease existed, and is attended with a full pulse, white tongue, and all the ordinary symptoms of inflammation.

Men advanced in years have sometimes bleeding from this part, amounting to one or two drachms in quantity at a time, which is often connected with a diseased prostate gland.

Children also are occasionally subject to hæmaturia, which may be considered as analogous to bleeding from the nasal passages. This case will generally yield to aperients and sulphate of zinc.

When hæmaturia arises from an irritable bladder, associated with dyspepsia, it is not usually dangerous; but if it arise from a fungus in the bladder, or from a diseased state of the prostate gland, the case is beyond the reach of art. When it is caused by inflammation, blood should be taken from the arm, and from the neighbourhood of the bladder; rest and low diet are to be observed; cold should be applied to the pubes and perineum; and castor oil, nitre, and mucilaginous drinks are to be prescribed. After the subsidence of the inflammation, tonics will be found beneficial.

When hæmaturia is apparently derived from a full habit, and is unattended with pain, it may be presumed to arise from plethora. Here general and local bleeding may be tried, but in such cases little can be done. The bladder is very intractable, and the hæmorrhage ceases when it chokes. When there is much languor, small doses of the *Oleum Terebinthinæ* may be given, and perhaps with benefit; but this remedy is not always to be recommended.

[The following remarkable case of hæmaturia came under my notice about four years ago, and it corresponds with the character of plethoric hæmaturia, above alluded to by Mr. Pearson:—

A lady, aged 67, of stout form, full habit, and of gouty constitution, from successive mental excitement became subject to rushings of blood to the back part of the head, and to palpitations of the heart, accompanied with serous infiltration into the peritoneal cavity, and œdematous swelling of the lower limbs. These symptoms continued for a considerable length of time, and gave rise to, and were eventually relieved by, profuse hæmaturia, recurring at irregular intervals from one to six weeks. The blood was of a venous colour, and sometimes passed in clots, which threatened to obstruct the urethra. This state of things had gone on for three years, and, although she looked pallid from such repeated losses of blood, and was of course weakened by them, still, after the hæmaturia ceased, she always felt relieved of a sense of fulness of the abdomen, and of pain, weight, and stiffness of the loins, which usually preceded it. The bleeding probably issued from the renal function; but as she never complained of any spasmodic pain of the lumbar region, and had never passed any calculous matter, it may be fairly inferred that the bleeding was the result of a plethoric condition of the portal system, rather than of calculi in the pelvic cavities of the kidneys. She had consulted several

eminent physicians without any decided benefit. The hæmorrhage ceased and recurred according (apparently) to the state of the vascular system. The urine, when the hæmaturia was absent, was not albuminous.]

Dysuria Urethralis.—1. *From Indurated Swellings about the Veru-montanum.*—In this case the canal is not much diminished, but the stream of urine is small and voided with difficulty; a kind of gleet is always present, which does not yield to common remedies, and spasm is caused by passing a bougie; there is also uneasiness in the perineum, ardor urinæ, and impatience to void it. The most certain sign of this disease is a bloody state of the semen. The cure must be attempted by the proper use of bougies, and by producing a discharge in the locality of the induration, so as to remove, if possible, the callosities.

2. *From Stricture.*—Strictures of the urethra may be divided into three kinds. 1. Simple contraction. 2. Contraction, with spasmodic action. 3. Purely spasmodic action.

Strictures occur in almost every part of the urethra but more frequently behind the bulb. Strictures sometimes produce a suppression of the secretion of urine, so that, perhaps, the patient makes water once only in sixteen or eighteen hours. When the stricture has been dilated, the secretion is considerably augmented and the stream is increased.

During the existence of a stricture the urine is divided in a small stream, has a forked appearance, dividing into two or three streams, or is flattened transversely, or twisted like a corkscrew.

Strictures are also frequently followed by retention of urine, from any irregularity, such as drinking spirits, and using long continued or violent exercise.

The existence of stricture can only be ascertained by the introduction of a bougie, and in performing this operation the young surgeon should be careful he does not mistake one of the lacunæ of the urethra for stricture, a mistake into which he may be apt to fall.

The existence of urethral contraction does not prove that the patient has ever had any venereal complaint, since it may occur where there has been no gonorrhœa.

There are three methods of curing strictures; first, by incision; second, by caustic; and, third, by dilatation. The method of curing primary stricture by incision is a very dangerous, and has proved a fatal, operation, one indeed which can scarcely be found necessary. The method of cure by caustic is of ancient use, and was long employed before the advantages of the mechanical method were understood. In simple spasm, caustic, judiciously applied, will relieve much sooner than a simple bougie, but it must be admitted that it occasionally produces violent rigors, resembling those of ague; dangerous hæmorrhage, which has brought the patient to the brink of the grave; severe irritation of the urethra, and extensive induration of

the canal, as if a great part of it had been destroyed, producing a lengthened and impenetrable stricture; indeed the inconvenience and dangers are frequently so great, that no persons should make use of caustic in the treatment of stricture unless they are acquainted with the advantages and disadvantages resulting from its employment; besides, strictures may be treated sooner without, than with caustic, and patients are not less liable to a relapse after the use of caustic, than when cured by the simple bougie.

Mode of using Bougies.—With regard to composition, bougies ought to have a smooth and mild surface, with a due degree of stiffness.

Having been imbued with oil, the bougie is to be passed slowly and with gentleness, at the same time drawing forward the urethral canal. It ought never to be suffered to remain in longer than an hour, indeed half an hour will often be found long enough. The introduction should not be repeated oftener than every other day, and great care should be taken not to inflame the urethral membrane, lest such a result may delay the repetition for a week or more.

It is not uncommon for the use of the bougie, at the commencement, to occasion rigors, and some degree of ardor urinæ, but these effects will generally subside after it has been introduced several times.

If a swelling of the testicle supervene, the bougie must at once be discontinued; or if an abscess in the perineum take place, or in the cellular membrane, between the scrotum and thigh, with inflamed and tumefied absorbents, the bougie will no longer be admissible, and the patient must be kept quiet, and a poultice applied; sitting over the steam of hot water will also be of use in this case. A swelling of the prepuce to a considerable degree, and irritability of the bladder, are sometimes also produced by the use of bougies, which symptoms are to be treated with the ordinary remedies. These untoward results shew that the surgeon ought not to be in too great haste to cure a stricture.

When the bougie is left in the urethra, care should be taken to secure it lest it slip into the bladder. This sometimes happens, and when it does occur, the urethra is to be grasped firmly in perineo, and the penis retracted over the bougie.

Bougies at their distal ends should be rather conical, so as to act on the stricture, but if the contraction be so great as only to admit the passing of a very small bougie, it should terminate by a round point. Those which bend readily are more advantageous in some strictures, as they follow with the windings of the canal which have been produced by the disease.

Bougies must be regularly used, till the whole canal is open, and this may be accomplished in from six to twelve weeks; afterwards they must be introduced occasionally,—as once a fortnight, then once a month, and lastly, once in three months.

In spasmodic stricture, large bougies with obtuse ends will be most useful. When the meatus urinæ is contracted, the continued distension from a uniformly large bougie gives considerable pain, and may occasion hæmorrhage, it therefore is convenient in such a case to have the end of the bougie larger than its middle, and thus the constant distension of the contracted orifice will be avoided. Great inconvenience certainly results from a small meatus, but it will be better to be content with passing a bougie the size of the orifice, than to enlarge by incision.

A sound will sometimes pass where a bougie will not, but if much force be used with either instrument, retention of urine may be the result.

When by the passing of a bougie water is made to escape from the bladder, as in ordinary cases of retention, the bladder is not always able to evacuate itself wholly by the first effect, and then it becomes necessary, after waiting a quarter of an hour, to introduce it again, in order to produce another contraction.

When strictures occur at an inch and a half to two inches from the meatus, they are very troublesome, and it is in these that contraction of the meatus more commonly occurs.

Hæmorrhage rarely happens except from violence, or from the urethra contracting firmly upon the bougie. In some persons there is great tenderness of the urethra, so much so, that it cannot bear any plaster bougie, but finds no inconvenience from a metallic one; some, indeed, cannot bear wax composition in any form.

When a bougie is unskilfully managed, a false passage may be made through the urethra into the cellular membrane. This may be suspected when there is no alleviation from a long continued use of bougies.

If the stricture be so complete as not to admit the finest bougie, an endeavour must be made to induce suppuration of the part by covering the end of a large bougie with the Unguentum Hydrargyri Nitratis, and pressing it against the walls of the stricture.

When the stricture is complicated with spasm, great obstruction will probably be found at first, but after gently pressing for some time against it with the bougie, it will suddenly pass into the bladder, or the spasm may often be relieved by gently irritating the urethra at its extreme part. If the spasm should not yield to these simple means, it will be advisable to apply a blister to the perineum once or twice before the bougie is resumed.

In the purely spasmodic stricture, a slight touch of the caustic will speedily remove the spasm. If this be not used, a very large bougie, or a cold sound, or a blister to the perineum, may be employed with advantage.

In the treatment of stricture, too much ought not to be attempted at once, although some will bear the introduction every other day, others will only bear it every third day, and it will also be prudent not to

stretch the urethra too much at any one time. In this place Mr. Pearson relates the following interesting case:—"A patient in the Lock Hospital had a stricture two inches from the meatus, through which the smallest probe could not be passed; it seemed a complete *cul de sac*, and the urine could only be passed in small drops, and with great pain. I introduced a director, and laid open one inch of the urethra to the point where the director terminated. I then dissected down to the contracted part of the canal, and found it in a very indurated state; half an inch beyond the contraction the urethra was perfectly sound. A catheter was kept in the bladder, and the wound healed in a month, after which a bougie was passed every two days."

Fistula in Perineo.—When a person has laboured long under strictures, as the bladder meets with unnatural resistance, some portion of the urethra between the bladder and the stricture becomes dilated and forms a pouch for the urine. The urethra at length in some parts of the pouch gives way, and if the orifice be small the urine passes into the cellular substance by drops; a tumour is then formed, partly of pus and partly of urine, which does not always burst externally. The abscess may rupture as high as the buttocks, and even at the lower part of the abdomen. At other times there may be eight or ten different openings, and an immense quantity of pus discharged.

In every case of simple fistula in perineo, the employment of fomentations, poultices, and bougies, will generally be successful. The cure of the strictures will in most cases be the cure of the fistula.

When the stricture is so complete as not to leave the urethra open, it must be perforated; and as there is not always the advantage of having a staff, the operation is sometimes attended with difficulty.

In cases where several sinuses are found, they must be laid open, their edges scarified, and the indurated parts removed; it is absolutely necessary to touch the staff by a probe introduced through the incision, for merely laying open the integuments is not sufficient. Where no staff can be used the success of the operation is uncertain.

Sometimes fistula is caused by laceration from an accident. The patient makes water into the scrotum, and if a catheter is introduced into the urethra, it will pass through the laceration. In this case, first make a free incision into the perineum to remove the blood and urine; and when suppuration has taken place, introduce a soft bougie into the bladder. After the fistula has been laid open down to the urethra, a catheter is sometimes found so irritating, that it has been deemed advisable to lay it aside.

Where the parts are brought nearly into a healthy state, the flexible elastic catheter may be used; but if they are much diseased, the plan will be productive of little advantage. The object is to bring on suppuration

and healthy granulations, and when the catheter is introduced, it ought but seldom to be left in the bladder, unless the difficulty of introducing it is very great. Passing a bougie every day and keeping it in for a few minutes, will do more good; for an attempt to pass the catheter into the bladder will fail, unless the course of the urethra can be found; in all cases, therefore, it will be prudent first to give a fair trial to the bougie before the catheter is used.

There are some cases of stricture in which no instrument can be passed into the bladder: fistulæ, under such circumstances, are advantageous as a salutary effort of nature to save the life of the patient.

Enuresis — Involuntary Flux of Urine.—*Enuresis puerpera.*—When gangrene of the bladder is produced by long continued pressure, and a part of it sloughs, the unfortunate patient becomes subject to an involuntary discharge of urine. Sometimes the inner surface of the urethra is studded with minute calculi, which may be detected by introducing a catheter into the bladder and the finger into the vagina.

There is no particular remedy for this disease. Injections may be used to keep the vagina clean and wash away the lithic deposits. The patient may be rendered more comfortable by putting a portion of soft sponge into the orifice and withdrawing it three or four times a day.

Enuresis paralyticorum. This species arises from diminished power of the sphincter vesicæ, the detrusor power remaining unimpaired. In this case there are two modes of alleviation, one by an instrument called the "sphincter urethræ," which will be found very inconvenient; the other by a bladder being fixed to the penis, which most patients prefer.

Incontinence of urine will often be produced by stricture, especially when near the neck of the bladder; for if obstacles to the exit of the urine are long continued, the parts become overstretched and hardened, so that the sphincter of the bladder at length loses the power of contraction.

Enuresis infantum may arise from too great a mobility of the muscular fibres of the bladder, or a diminished power of its sphincter. In this disease, the indication is to increase the tone of the part. Taking large quantities of liquids should be avoided, and the remedies to be employed are the sulphate of zinc, cold bathing, and blisters to the perineum or sacrum. The tincture of cantharides may also be given advantageously, beginning with the dose of twenty drops for a child seven years old, and increasing it till strangury is produced; till this is effected little good will be experienced. The patient should feel a sense of heat and uneasiness, and frequent desire to make water. If the pain be violent the dose may be lessened, and continued in such a quantity as can be borne without inconvenience. Electricity is sometimes of use.

I have now brought these papers to a close. One more might have been added on syphiloid disease, but as I can discover nothing in the manuscript before me that could throw any light on this morbid complication, either in a pathological or therapeutic point of view, (for, in Mr. Pearson's time, the curative efficacy of the iodide of potassium was not known,) I have deemed it best to omit it, and I am the more justified in doing so after the recent publication of M. Ricord's valuable lectures on syphilitic disease in the pages of the *Lancet*, which comprise all that is known on this subject.

I am but too conscious of the very imperfect character of the notes which have been so indulgently recorded in this Journal, and I sincerely hope, if any autograph of the late Mr. Pearson on lues remain in the possession of his relatives, it will one day be given in a complete form to the public. Such a publication could not fail to become a standard work on this important subject, and at the same time it would be carrying out his declared intention.

In justice to the high professional reputation of the late Mr. Pearson, I think it right to add that he was the first to describe the symptoms and treatment of those forms of disease which he has denominated "erethismus" and "eczema mercuriale," and that he was also the first to recommend "free exposure to air" in cases of excessive salivation.

It might probably appear, *primâ facie*, that his mercurial treatment was unnecessarily severe; but when we find M. Ricord (the most experienced surgeon in lues of the present day,) stating it as his opinion that the syphilitic diathesis can hardly be eradicated, we ought not to be surprised that Mr. Pearson should have insisted on a decided and protracted adhibition of mercury as the only antidote to the true syphilitic poison.

Southampton, December 13, 1848.

A CASE OF INCOMPLETE REDUCTION "EN MASSE" OF AN INGUINAL RUPTURE;

WITH THE SUBSEQUENT TREATMENT, AND APPEARANCES OF THE PARTS POST MORTEM.

By JAMES REID, Esq.,

Surgeon to the Kent and Canterbury Hospital.

The reduction of a hernia in a mass with its investing peritoneal covering, by the efforts used in applying the taxis, and the appropriate mode of treatment, has, until the last few years, rested almost entirely upon the authority of foreign surgeons.

Mr. Luke was the first, I believe, in this country, to make the occurrence the subject of a particular treatise.* Since his excellent paper, founded on the

* Previously to this, cases of the accident had been noticed by Sir C. Bell, Messrs. Green and Callaway, and Mr. Bransby Cooper; but Mr. Luke was the first British surgeon who deduced the line of practice to be adopted.

experience of five cases, was read before the Medico-Chirurgical Society, and published in their "Transactions," notices of three other cases have appeared in the English journals. The hitherto supposed rarity of the accident has therefore much diminished, and the influence that the probability of its occurrence should exert, during the investigation of an obscure case in which symptoms of strangulation exist, has become more recognized. Under present circumstances, however, every additional case may be viewed with interest, and may assist in confirming or elucidating the information already obtained upon the subject. It is with this view that I am induced to publish the following case of incomplete reduction "*en masse*."

J. H—, a strong active old man, aged 75, was admitted under my care, into the Kent and Canterbury Hospital, with symptoms of strangulated hernia. He had been subject to double inguinal rupture, partly occupying the scrotum, for which he had worn a truss forty years; and more recently to a protrusion, the size of a walnut, at the navel. The right inguinal rupture had appeared some few years after the left, and had troubled him most, having on one occasion become incarcerated for several days, occasioning constipation and vomiting, and being at length reduced with difficulty. Two days previous to his admission into the hospital, he exerted himself more than usual in spearing for eels; feeling afterwards indisposed, he went to bed sooner than usual, and was soon attacked with severe pain in the abdomen, followed by vomiting. He then discovered that the rupture had descended, and made ineffectual attempts to reduce it. The next day he renewed the efforts, applying for that purpose a hot tile, and making pressure upon it. After an attempt continued for some time, the swelling was reduced in size, and he considered that he had returned it, but the symptoms still continued. A medical man was now sent for, who detected a small swelling in the situation of the inguinal canal; an attempt was made to reduce it, and purgatives were administered.

He was admitted into the hospital forty-eight hours after the occurrence of the first symptoms. The countenance was anxious; there was constant vomiting, accompanied by hiccough; the matter thrown up was the contents of the small intestine; the abdomen was distended, but not tender, except in the immediate neighbourhood of the right inguinal region; there had been no action of the bowels for forty-eight hours. Tongue stained by the matter vomited; pulse of natural frequency, full, intermitting; the radial artery felt ossified. About the situation of the right internal abdominal ring, there was a small diffused swelling, (better perhaps described as a fullness of the part,) so ill-defined that it was said, at first, there was no protrusion; however, on comparing it with the opposite side, and pressing in the fingers around it, the tumour was more readily detected. Pressure upon the swelling produced pain, and caused it to recede; but it returned immediately upon the pressure being relinquished. A lump, feeling like a loose sac containing omentum, occupied and extended from the external ring.

The taxis in the warm bath, a turpentine injection, &c., producing no change, an operation was determined upon. An incision was made opposite the internal ring directly over the swelling, and continued parallel to the inguinal canal. The tendon of the external oblique, the fibres of the internal oblique and transversalis, each, in distinct layers, were divided, and a hernial tumour, the size of a large walnut, was exposed in the upper part of the inguinal canal. A portion of small intestine, of a dark colour, but reserving its natural lustre, and a small quantity of dirty fluid, were found in the protruded sac. This portion of the sac was but a small part of the whole; the remainder was situated within the abdomen, so that it required the full length of the index finger (a middle sized one,) to reach the seat of stricture—the neck of the sac. It was necessary before dividing the stricture, to obtain more freedom by incising the lower edge of the abdominal muscles in a direction across their fibres, and, in order to prevent the neck of the sac receding from the finger, to have it held by the divided edge. The nail of the fore-finger was then, with difficulty, insinuated between the intestine and the stricture, and the latter was divided. Although the finger freely entered the abdomen through the neck of the sac, some obstruction opposed the return of the intestine. A resisting band was felt, situated to the inner side of the neck of the sac, between which, and the abdominal parietes, the intestine was pressed, and could be felt passing towards the mesial line beyond the reach of a finger; it was dislodged from this situation and pushed back into the abdomen. The wound was closed, and a bandage applied. The further details of the progress of the case until the patient's death are briefly these:—

No immediate relief was afforded by the operation; partial quiet and alleviation of symptoms were obtained by an opiate administered directly after; the vomiting continued and constipation remained. No satisfactory action of the bowels was obtained by the free exhibition of enemata, thrown up with the long elastic tube introduced to its full extent. Symptoms of peritonitis were established (in spite of remedies,) twenty-four hours after the operation, and in thirty-six hours, evidences of failing vitality appeared; gangrene of the posterior part of the scrotum was discovered, and in the course of twelve hours it spread over the scrotum, penis, lower part of the abdomen, and upper part of the thighs. The patient died in rather more than forty-eight hours after the operation.

Post-mortem examination thirty-six hours after death.—The gangrenous integument was distended with gas. The layer of adipose tissue was thick; the edges of the wound not adhering. There were evidences of general peritonitis, which were most marked in the right inguinal region, where the convolutions were glued together by recently effused lymph. The portion of intestine that had been strangulated, consisting of nearly a foot of the upper part of the ileum, was dark coloured, almost black, covered with patches of recently effused lymph, puckered up in the position it must have assumed in the sac, and deeply marked by the stricture, having an additional depression, partly encircling it below the indenture. The position and

relation of the sac will perhaps be better understood by describing it as forming a double pouch, with a common neck and opening; a smaller pouch, about one-fifth of the whole, partly within the abdomen, and partly protruding through the internal ring, and a second and larger pouch, placed nearly at right angles to the former, and extending from the inner side of the internal ring between the peritoneum and abdominal parietes. The cord of the obliterated hypogastric artery had been separated from its natural position on the inner side of the internal ring by the interposition of the larger pouch. It was this which formed the resisting band felt during the operation, and which had caused the second mark upon the portion of intestine that had been strangulated. The sac was readily drawn out from its double position, and then formed a simple bag. The outer side of the neck of the sac was only slightly separated from its connection with the abdominal parietes. The substance which had been felt at the external ring proved to be a mass of fat, connected by a long pedicle, extending up the inguinal canal to the exterior of the protruded portion of the sac.

Mr. Luke, in his observations, says "that the firmness of the adhesions of the parts in which a hernia is imbedded bears no proportion to the duration of the hernial protrusion." This remark is of great importance in relation to the efforts that it is safe to make in reducing a hernia by the taxis, both as regards the degree of force to be used, and the period to which it may extend. The evidence furnished by the present case is not very satisfactory on this point, as I could not obtain from the patient a very clear detail of what had previously occurred. As far as I could ascertain, the force used was not sufficient to cause much pain, the reduction of the swelling was perceived by a gradual diminution in its size, not by any sudden decrease. There was no appearance of injury or bruising of the integuments in the neighbourhood of the swelling when he was admitted into the hospital, and the intestine also was free from ecchymosis. On the whole, I am inclined to the opinion that the reduction was effected *more* by the continual employment of a degree of force, not injurious perhaps in itself, than by any one or more undue violent efforts.

My first conclusion with regard to the nature of the present case was, that a scrotal rupture had been partly reduced, a portion of intestine remaining in the inguinal canal, constricted in some manner at the external ring. This opinion was founded on the evidence of the indefinite swelling, the form a protrusion assumes when small and confined to the inguinal canal, and the pressure at the external ring of what I thought was a hernial sac. The ready yielding of the tumour and its reappearance raised a difficulty to such a diagnosis, and a suspicion of the real nature of the case was then entertained; but the supposed sac at the external ring was an obstacle to such a view of the matter. The clear indication, under existing circumstances, was to cut down on the swelling in the canal, and explore the mystery. The formation of fat about the sacs of old herniæ is mentioned by some authors on hernia.

I have, since this case occurred, noticed a similar

mass of fat appended to an old scrotal hernia that became the subject of a *post-mortem* examination; it was uniformly attached to the sac, though easily separable, and might have been left behind in the reduction of the sac, in the manner that I conjecture the mass in the present instance to have been. More recently, in operating upon a strangulated inguinal rupture, which had existed many years, and been operated on before, after I had divided a very thick layer of fascia, a mass was exposed, resembling at first sight, omentum covered with a thin sac; it proved to be a layer of fat about 1-3rd of an inch thick, connected with the sac which was situated beneath it.

Mr. Luke, in speaking of the facts connected with reduction in mass, and the conclusions to be drawn from them, remarks "that the presence of a sac, even without hernial contents, causes an abdominal fullness in the part, easily ascertained by examination. The absence of such fullness in a part where hernia is known to have previously descended, necessarily leads to the conclusion that the sac upon which it depended has been displaced, and probably returned, together with the hernia. The sac in inguinal hernia below the external ring, becomes united with the spermatic cord, whereby the latter is usually rendered indistinct and obscure. The absence of that indistinctness and obscurity implies the removal of the cause which previously produced them, and, therefore, that the sac has been displaced. The *continuance* of the indistinctness or obscurity leads to a directly *contrary conclusion*."

The present case shows that the conclusion to be drawn with regard to the presence of the sac, from the existence of a substance feeling like omentum in the situation recently occupied by a hernial protrusion, suspected to have been reduced in mass, should be received with some reservation.

Unconfirmed by other evidence, it cannot be viewed as a certain proof. In addition to this, the existence of depositions of fat in the cord often placed at the external ring, cysts of the cord, and varicocele, would cause a fullness and obscurity about it, which could not be distinguished from that occasioned by the sac, with or without some portion of its contents. The only effect, perhaps, of this uncertainty on practice in such cases would be to afford additional reason for an exploratory operation. The direction which the returned bowel with its investing sac took, to the inner side of the internal ring, is not that which appears generally to have been observed in inguinal hernia,—viz., below the level of the internal ring towards the cavity of the pelvis, or else towards the outer side of the ring. The incomplete reduction of the hernia is in accordance with the results of the experiments made by Jules Cloquet on the dead subject,—that "in external inguinal hernia, the reduction is generally incomplete, and the swelling re-appears as soon as the efforts at reduction are discontinued." I cannot help thinking that, in this instance, the obliterated hypogastric cord had some share in causing the small portion of the rupture to re-appear when apparently reduced, and preventing the complete reduction of the whole. By the approximation of the internal ring, from the long continuance of

the rupture, towards the obliterated artery, and by the interposition of the sac and intestine between the parietes of the abdomen and the peritoneum, (the neck of the sac retaining its connections externally,) the inner edge of the neck and the obliterated artery would be forced in a direction backwards and somewhat outwards, so as to bring the latter more nearly opposite the internal ring. Its resistance, added to that afforded by the connection of the peritoneum with the walls of the abdomen, would then form an obstacle to the complete reduction. Be that as it may, the cord of the vessel exercised considerable pressure, much more than might, *a priori*, have been anticipated. The difficulty in returning the intestine after the neck of the sac had been divided, and the mark discovered about the portion of bowel that must have occupied the large pouch, sufficiently show this. The manner in which the reduced portion of rupture was girt between the hypogastric cord and the abdominal parietes would have prevented the reprotrusion of that part by the efforts of coughing and straining, as have been recommended, the effect of such attempts being to cause the cord to press more tightly upon the part it constricted. The depth from the surface at which the stricture was placed, and the obstacle the hypogastric cord occasioned to the return of the intestine, furnished the only difficulties in the operation. The return of the intestine might have been facilitated by dividing this cord if it could have been recognized; but then, it should be remembered that it is sometimes pervious by a narrow canal conveying blood for the supply of superior vesical arteries, and a troublesome, perhaps serious hæmorrhage, might have resulted. The continuance of the symptoms of strangulation after the operation was due to the portion of bowel not recovering itself after it was replaced.

Canterbury, Nov. 7, 1848.

CASE OF SUDDEN DEATH, CONNECTED WITH PREGNANCY: PHLEBITIS AND DUODENITIS.

By R. F. GEORGE, Esq., Surgeon to the General Hospital, Bath.

(Read at the Quarterly Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, September, 1848.)

I am induced to bring before this meeting a brief statement of a case which fell under my observation in the early part of last year, on account of its bearings both upon pathology and forensic medicine.

On the 6th of March, 1847, I was requested to see a stout girl from the country, between 15 and 16 years of age, who, I was informed, had been suffering for the last three months from a painful swelling of the left leg. The disease commenced with acute pain in the calf, followed quickly by a firm colourless tumefaction of the whole limb up to the knee. The catamenia had been suspended for four months, but there was no

sickness, no loss of appetite or strength, slight excitement of the circulation, and little apparently amiss in the general health beyond the interruption of the menses and a sluggish state of the bowels. She had a childish horror of medicine, and had therefore imperfectly attended to the directions of her medical adviser, and had rejected the various nostrums which her maternal friends recommended for the restoration of her periodical function. I further learnt, that about six weeks before she came to Bath, after the application of some leeches to the lower part of the leg, and other remedies, the swelling of the limb rather lessened, but that in the night she was attacked with intense pain in the region of the heart, with anxiety, and coldness, which symptoms, under the use of stimuli, passed off, and immediately afterwards the leg returned to its former state of tumefaction. From the character of the swelling, and its history, there could be no doubt of its being the result of inflammation of the saphæna vein, though the cause of that phlebitis was obscure.

I ordered the application of leeches to the calf, with rest, and some aperient medicine, and two days later, finding her easier, I directed their repetition, which removed the pain and swelling, and in three days the patient was able to walk without inconvenience; but on the eighth day she was attacked with violent pain of the same character in the right calf, which the prompt use of leeches relieved in a few hours, and during the remaining four days of her life she moved about with ease. On the day of her death she appeared in good health and spirits, made a hearty dinner of beef, vegetables and porter, with the family, at one o'clock, and remained in the same room where she had partaken of that meal until three. Immediately that she quitted the apartment she began to groan, complained of agony at the pit of the stomach, became faint and vomited, and in three quarters of an hour breathed her last.

I reached the house about half an hour after her death, and hearing the history, desired that a vessel containing a large quantity of the matter vomited, consisting of partially digested food, of a brown colour, and strongly smelling of beer, should be set aside for future examination, a direction which, through the stupidity of the nurse, was not attended to.

Examination twenty-four hours after death:—Body well formed and very fat; complexion muddy; breasts developed with dark brown areolæ; legs still rather swollen and hard; no indurated cord or knot perceptible in the course of the saphenæ; a thick layer of fat deposited between the skin and muscles; blood in the superficial veins extremely fluid. The lungs were healthy, a small quantity of serum being collected in the cavities of the pleura, but not more than would be caused by infiltration. Heart small and rather pale, its right side filled with fluid blood, and a small quantity of colourless serum was found in the pericardium. The mouth and fauces, as well as the œsophagus, presented a healthy appearance throughout. The stomach, and three feet of small intestine, were removed for future examination. The rest of the intestinal tube, and other abdominal viscera, were in a normal

condition; the bladder was free from inflammation, and contained a small quantity of urine. The uterus was emerging from the pelvis; its fundus and upper surface were marked by broad streaks of inflamed veins; its interior was healthy, and contained a male fœtus of about four months. The ovaries were healthy, and there was no effusion into the abdomen or pelvis. The left vena saphena was dissected out from the calf upwards; it was throughout its course red and thickened, and its calibre filled up with a plug of adherent fibrin.

In making the above examination I was assisted by my friend Mr. Soden, and at its conclusion we carried the stomach and the intestine to Mr. Bartrum, by whom, conjointly with Dr. Davies, a most careful chemical analysis of the contents of the stomach was conducted, and at whose house a close investigation of the parts was made on the next day, of which the following is a summary:—

The intestine beginning from the pylorus was three feet in length; it was spread upon a clean board, and laid open through its whole extent; it was generally empty, and the greater part appeared natural in colour. A portion of the bowel, for about nine inches in extent, commencing at the pylorus, was in a state of minute punctiform injection, gradually increasing in intensity; the part included between the fifth and eighth inches, being that in which the depth of colour was greatest, from thence it gradually abated until the redness was lost in healthy structure at about the fifteenth inch from the pylorus. From this point downwards the intestine presented such an appearance as is usual during the time digestion is going on.

Stomach—Contents:—The stomach contained five fluid-ounces of partially digested food, mixed with mucus, of a dark brown colour, smelling strongly of malt liquor; the whole lining membrane of the stomach was spread over with a thick and pretty uniform layer of tenacious mucus; commencing within half an inch of the cardiac orifice, and extending over a space of four square inches, the mucous membrane presented the appearance of acute inflammation, consisting in minute punctiform injection, of a dark red colour; from this point, until within three inches of the pylorus, the mucous membrane was partly inflamed and partly healthy, there being rather an extensive patch of injected membrane about the centre of the viscus. At the point named,—viz., three inches from the pylorus, the mucous membrane was again minutely injected, the colour being more florid than that at the cardiac extremity, and became continuous with the condition already described in the duodenum.

Dr. Davies and Mr. Bartrum, after devoting a considerable time to the analysis of the contents of the stomach, were unable to detect a trace of any vegetable or mineral poison. Their examination was directed to prussic and oxalic acids, arsenic, and bichloride of mercury, besides savine and local irritants, none of which were found.* If we may rely on the results of their varied

experiments, (and, from the care used in conducting them, they are fully entitled to confidence,) the swallowing of poison must be dismissed from our consideration, as a cause of the inflammation of the stomach and duodenum which proved so rapidly fatal. The origin of this destructive inflammation becomes then a question of peculiar interest, taken in conjunction with the uterine phlebitis which, from the history of the case, there is reason to suspect had, more or less, existed during many weeks. The duration of the duodenal inflammation is also a subject of interesting speculation, as there were no symptoms indicating its presence until three-quarters of an hour before death, and yet it is difficult to believe that so much organic alteration as was apparent upon the *post-mortem* examination, could be developed in so short a time.

PROVINCIAL Medical & Surgical Journal.

WEDNESDAY, JANUARY 24, 1849.

It is a singular anomaly that, with a numerous body of educated and extensively-qualified gentlemen, very many of whom are individually held in the highest estimation by the public, and to the exertions of whom, as a body, both the Government and the community stand confessedly deeply indebted, several public offices in the State, which can alone be properly filled by members of the medical profession, should be conferred upon individuals of other professions, or of no profession at all, and whose previous education and habits of life, in many instances, absolutely unfit them for the discharge of duties of this description. To refer again to the present President of the Board of Health, as a most illustrious example of the anomaly:—What can be more absurd, than to find a Peer of the realm, belonging to one of the highest families of the kingdom, an hereditary legislator, discharging the functions of chief of the Medical and Sanitary Departments of this kingdom, almost even without the assistance of any medical person, at a time, too, when a malignant and fearfully fatal pestilence threatens the entire country?

Let us not be misunderstood here, in supposing to infer that the noble lord is descending from his high estate in thus taking office with a view to the conservation of the public health. We have too high a sense of the real position of that profession to which we have the privilege of belonging, to deem it any degradation to the highest in the land, really to know and to

* The substances sought for in the analysis of the contents of the stomach were prussic acid, bichloride of mercury, arsenic, and oxalic acid, not a trace of any of which could be discovered by Dr. Davies or Mr. Bartrum.

practice it, should circumstances render it necessary for them to do so. Nevertheless, it is not the special calling of our hereditary legislators to attend the bed-side of the sick and the dying, and professionally to administer to their wants; neither are they fitted by long previous study for such duties, important and responsible as they are. Had the Noble Peer, indeed, undergone such a course of study, and fitted himself for such duties, there could have been no objection to meeting Dr. the Earl of Carlisle, at the bed-side of the sick, nor to Dr. the Earl of Carlisle, presiding or assisting at a Board of Health; nor indeed to his giving the sanction of his rank and station, under any circumstances, to the well-directed efforts of a Board, composed of qualified members. But when, on the contrary, we find the Noble Earl, knowing literally nothing of what he is about, engaged in concocting pills and potions, and issuing lengthy directions for locking up the bowels of the entire community, what but ridicule can attach to him? What but the direct interference of those truly qualified—as we have, indeed, had example of in the counter-acting directions issued by the College of Physicians and other genuine authorities—could save the country from the effects of such mischievous interference?

The unfortunate position in which the medical profession is at present placed, by the unsettled state of its general constitution, has, no doubt, tended much to the evil complained of, but we cannot but hope that a better prospect is before us. We are assured by one of our contemporaries, that a settlement of this long agitated question must take place in the course of the ensuing session of Parliament, and the gradual approximation which has been brought about amongst contending parties, gives much reason to hope that he is right. The time, therefore, is come when the great principle should be imperatively laid down—the great fact established—that whatever relates to the conservation of the public health should be placed under the direction of the medical profession. No one, we believe, will be found to deny that the members of that profession, both generally, and as individuals, have established a high claim to the consideration of the public; and it is therefore but the repayment of a long debt of gratitude,—a debt accumulated for ages, that any honours and rewards, suited to their professional calling, which the public may have to bestow, should be

conferred upon them. On this ground alone, independent of the additional claims of the public advantage,—of their peculiar fitness for the duties of all such offices as are connected with the public health,—of the peculiar unfitness of all others for such offices,—it becomes imperative that public medical duties should be alone entrusted to the care of educated medical men.

A Board of Health should be essentially a Medical Board; a Sanitary Commission should be essentially a Medical Commission; for how can the health of the public be entrusted to the care of individuals who know not how to preserve their own, or general sanitary measures to those who are in a great degree necessarily ignorant of the special causes of disease, and of the effects to be apprehended from special morbid agents. The health of the Army and Navy should be placed, as indeed it is, under medical superintendence; military and naval hospitals under the care of medical inspectors; the treatment of the men individually, and the sanitary state generally of the several regimental corps, and crews of vessels of war, under regimental and naval surgeons. So also should the health of that vastly important body, now constituted a civil department of the public service, under the Poor-Law Commission, be entrusted to medical men, and a fitting system of medical attendance, inspection, and control established and committed to those who are alone competent to discharge its duties. A Medical Commissioner is indispensable for this service, and the acting medical officers of Unions should be in medical affairs responsible to him alone, and relieved from all that truckling dependence upon parish and union authorities which disgraces and impedes the operation of the system, as now pursued, and degrades the union surgeon from his professional eminence to a level with a mere clerk or ordinary relieving officer.

These, then, are special points for which the medical press should earnestly contend, and if it is performed with perseverance and energy, and well seconded by the profession generally, (who after all, were they but to act together, would have the settlement of the question in their own hands,) their efforts cannot but be attended with success. The principle laid down is manifestly just and equitable in itself, and it has become a moral duty in the public towards the profession, to

enforce it and carry it out, as well as for their own advantage, that in all their concerns, public or private, the best-qualified officer must be the most efficient, and in the end the most economical.

We beg to call the particular attention of our readers to the notice which appears in this day's Journal, announcing the postponement of the general meeting of the Poor-Law Medical Convention. We learn, with much pleasure, that this postponement will enable Lord Ashley to take the chair, and we anticipate much good to the cause from the presidency of that estimable and benevolent nobleman. We beg, however, to remind Union Medical Officers, that success must depend, in a great measure, on their own exertions, and that they ought to make every effort to support the Committee at the present crisis. We trust that in distant parts of the country delegates will be at once appointed to attend the meeting, and to communicate with the Committee; and we beg to suggest that, of the large number of gentlemen interested in the improvement of Poor-Law management, all those who cannot attend the meeting should, at least, send a subscription.

Review.

Cure of a True Cancer of the Female Breast with Mesmerism. By Dr. ELLIOTSON; with Introductory Remarks by Dr. ENGLEDDUE. London. 8vo. pp. 39. Walton and Co.

In five years over which the treatment of this one case extends, many thousand people have died in England of cancer, and yet a learned physician publishes *this single case as evidence* of the success of a new plan of treatment. And what is more, the only surgical opinion of repute which he quotes, (that of the late Mr. Samuel Cooper,) calls it "a painful tumour, which was believed to be of a cancerous nature," thus throwing doubt as to its cancerous nature at all. The evidence, then, amounts to this:—A woman has a painful tumour of the breast, very like cancer, which, in five years of that very critical period of her life—between 42 and 47 years, is absorbed, her general health having greatly improved, and during this period she was mesmerized, with some intervals. *Valeat quantum valere potest.* If this is to be considered as medical evidence, such as medical men will believe, so as to induce them to recommend or try a new plan, open to the gravest objections, we should feel ashamed of our profession. But that national common sense and judgment which the practice

of medicine (especially in the provinces, where responsibility is not much divided,) fosters, is a guarantee against the propagation of such "mental fevers." That part of the pamphlet which is the most striking for its truth, is the quotation with which it is headed; and as Dr. Elliotson evidently wishes it promulgated, as he has translated it out of Dr. Francis Hawkins' Latin Oration before the College of Physicians, we willingly increase its circulation.

"Do not quacks hunt out the vices or infirmities of mankind to turn them to profit, some selecting one and some another for their purpose? Among quacks, the impostors called *Mesmerists*, are in my opinion, the special favourites of those, both male and female, in whom the *sexual passions burn strongly*, either in secret or notoriously. *Decency forbids me to be more explicit.*

"From these and similar artifices, the physician should be carefully removed and guarded, and this can hardly be accomplished except by a sound education, which will teach him to thoroughly abhor all *deceit and trick*."—*Harveian Oration, delivered by Dr. F. Hawkins, before the London College of Physicians, June 24, 1848.*

The general truth of this we believe. But we would modify the condemnation by stating also our belief, that many impostors impose upon themselves, and thus are not hypocrites, but rather like—

"Katerfelto with his hair on end,
Wondering at his own wonders."

That mesmerism occasionally produces the phenomena of somnambulism, catalepsy, and hysteria, every one who has studied the evidence must believe; but the whole process is so repulsive to men of clear clean minds, and is so open to the vilest abuse, that any benefits which may accrue from it are thought to be too dearly purchased. We thank Dr. F. Hawkins for openly and boldly stating the general opinion. Dr. Elliotson considers it a stigma that the medical profession neglected the facts of insensibility produced by Mesmerism, but at once employed æther and chloroform. Nothing, in our minds, proves more the real soundness of the morals of the medical body. Bodily health is a good thing, but there is something better. It is the pure in heart who see God.

Proceedings of Societies.

BATH AND BRISTOL BRANCH OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

The Quarterly Meeting of this Branch was held at the York House, Bath, on December 21, 1848.

J. C. SWAYNE, Esq., in the Chair.

There were present,—Messrs. Colthurst, Mayor, Morgan, and Ogilvie, from Bristol; Mr. Allen, St. George's; Mr. C. Edwards, Batheaston; Mr. Godfrey, Yatton Keynall; Mr. Jennings, Laycock; Dr. Morgan, Turley; Mr. Vicary, Warminster; Drs. Boyd, Davies,

Goodridge, M'Dermott, Lindoe, Tunstall, and James Watson, Messrs. John Barrett, Brace, Bartrum, George, Hunt, King, Mitchell, Skinner, Stone, and Waldron, of Bath.

SCURVY.

Mr. John Barrett read a paper on scurvy, as it had appeared in the neighbourhood of Bath, in the spring of 1847. (To be published in a future number of the Journal.)

Mr. Hunt observed that the class of cases quoted by Mr. Barrett were found among the poor, but in those in a better station of society he had found that the treatment advocated by Mr. Barrett could not be borne. The cases which had been seen by Mr. Hunt had been chiefly from the age of twelve to twenty years, with bleeding spongy gums, the only common apparent cause being the deficiency in the use of the potato. In treating such cases the first point was to rectify the secretions by purgatives, after which a mixed treatment succeeded best.

Dr. Davies observed that he was sure the meeting must feel obliged to Mr. Barrett for the elaborate paper that had just been read. Mr. Barrett had alluded to the United Hospital, and expressed himself anxious to obtain information concerning the experience of that institution, as regards the treatment of scurvy. As he (Dr. Davies,) was the only member of the medical staff of the hospital present, he would make a few remarks on the subject. Two cases had come under his care as patients of the hospital; one very severe; the other comparatively mild. The first patient had large fungous bleeding vegetations from the gums, almost covering the teeth, and the breath intensely fœtid, the system generally being in a very reduced condition. Both patients recovered rapidly under a generous diet, with porter, and two ounces of fresh lemon juice daily. He objected to the term "land scurvy," as calculated to mislead into the belief that land scurvy and sea scurvy were different diseases, whereas there did not seem any reason for considering them as such, as both are brought about by the same or similar causes,—viz., errors in diet; both present the same symptoms, and are removed by the same means. He thought, moreover, that the reporters on scurvy in different localities had for the most part taken a somewhat narrow view of the cause of the disease. Dr. Christison, for example, had attributed the malady in the Perth Penitentiary to the removal of milk from the dietary; elsewhere the loss of the potato has been considered the exciting cause of the disease. Probably in each case the observer was correct, but the proper induction would seem to be not that scurvy depends on the absence of this or that particular article of diet, but that it depends on some change in the ordinary diet, which involves the loss of that proper mixture of alimentary substances which experience has shown to be necessary for the healthy nutrition of the body.

CHLORINE IN FEBRILE DISEASES.

Mr. Edwards read a paper advocating the use of chlorine in febrile diseases, in solution, as tending to the purification, not only of the excretions, but of the

secretions. This induced a conversation between Mr. Barrett, Mr. Waldron, and Mr. Swayne, the tenor of which was, that though chlorine might appear to remove infection, it only acted as a deodorizing compound, from its absorbing the hydrogen which formed the basis of the various offensive gases; that it must be regarded only as an adjunct to other more efficient treatment, and that, notwithstanding its use, the contagious emanations from the lungs and skins of patients labouring under fever were as potent as without it.

IMPERFECT URETHRA.

Mr. Jennings read the following case of imperfect urethra:—

I was sent for on Dec. 13th, 1848, to see the male infant of Mrs. Fortune, twenty-six hours after birth. I found the penis unusually large, the glans destitute of prepuce, and the urethra absent. I proceeded to lay open the integuments with a bistoury in the mesial line at the junction of the scrotum with the penis; afterwards turning the point downwards, but failing in reaching the blind extremity of the urethra, I passed a sharp-pointed probe slightly curved downwards to the extent of an inch; still no urine flowed. After meditating for a short time whether I should puncture through the perineum, I determined upon making a second attempt with the probe, and on thrusting it about half an inch further, I was delighted upon finding its withdrawal followed by a profuse flow of urine. The case has since progressed favourably without a bad symptom of any kind. I have thought the case interesting, as in the event of a failure in hitting upon the urethra, a question might arise as to the best mode of puncturing the bladder, or whether either would be justifiable in so young an infant, who would most probably pass a miserable existence should the operation be attended with success.

Mr. Colthurst observed that if the operation described by Mr. Jennings failed in infancy, the bladder being almost an abdominal organ, should be tapped above the pubes, you might then probably be enabled, with careful manipulation, to pass a catheter through the vesical orifice of the bladder into the urethra, the extent of which would thus be ascertained in the perineum.

IMPERFORATE ANUS.

Mr. Jennings then read the following case:—

Mrs. Gay was, on the 28th of May, 1848, delivered of a fine male infant. Forty-eight hours after birth, the nurse informed me that she had given the previous day a dose of castor oil, but that having been rejected, together with the food which had been taken, she had repeated the dose, and finding that it had been retained, but without producing any evacuation, she was led to examine the child more closely, and then ascertained the nature of the case. I found the abdominal parietes much distended, and (what I had called the attention of the nurse to at the birth,) the penis tied down to the scrotum by a frænum; indeed there was a raphe running from that point backwards in the mesial line, towards the situation for the anus, at which point there was a slight depression, and I at first imagined that it

would only be necessary to puncture with a bleeding lancet. But this failing to reach the bowel, I plunged a trocar and canula upwards and backwards to the depth of an inch and a-half, through what I imagined to be fat and cellular tissue, but on withdrawing the trocar, no meconium escaped. I then made a second moderate thrust of about half an inch, when, on again withdrawing the trocar, I was gratified by an abundant flow of meconium. I afterwards enlarged the canal with a bistoury, with the loss of but a few drops of blood, and directed the nurse to pass a candle occasionally up the part (having no bougie then with me,) to prevent union by the first intention. The child continued to go on well up to the end of a month, when he evidently lost flesh. Castor oil and rhubarb, with magnesia, &c., were occasionally administered, but still he did not thrive, and at the end of two months died. I observed that the abdomen was generally unnaturally distended, although the calibre of the artificial anus was amply sufficient for the passage of the fæces, which were natural in every respect.

I regret that a *post-mortem* examination was not allowed, as I had no means of otherwise judging to what extent the canal had been shortened by the process of absorption, or whether a sphincter existed, although of that I have little doubt, as the aperture was generally closed when I examined the child.

[Since the narration of this case at our quarterly meeting at Bath, I have met with one almost precisely similar, recorded by Mr. Hutchison, in the *Medical Gazette* of Feb. 2nd, 1828, in which death, after five weeks, is attributed to the neglect of the nurse, and I am much inclined to impute it in this case to a similar cause.]

Mr. Swayne had seen several cases of imperforate anus and rectum. In one case the anus was not imperforate, in the others it was. In the former case about half an inch above the anus a swelling could be felt; this was pierced, a bougie was passed up, and the child recovered the use of the bowels. She lived for seven years afterwards, and experienced no inconvenience. In two other cases he had attempted to make a passage, but had failed. On examination it was found that there had been no tendency towards the anus; the rectum ceased abruptly, was adherent to the left side, and had not entered the pelvis at all.

Mr. Jennings then narrated two cases of laceration of the perineum.

BIRMINGHAM PATHOLOGICAL SOCIETY.

July 6th, 1848.

V. W. BLAKE, Esq., in the Chair.

DISEASED HEART: HYPERTROPHY, WITH DILATATION OF LEFT SIDE; DILATATION OF RIGHT SIDE.

Robert Davis, aged 64; countenance thin and anxious; features cramped. He is much emaciated, and suffering extreme debility. Skin cool; extremities cold; tongue furred and moist; thirst; pulse 70, irregular, and thready; bowels regular; urine reported deficient in quantity, and high coloured; breathing very laboured, cough, and slight expectoration; dyspnoea increased on

anything being taken. On taking fluids a portion returns through the nostrils, accompanied with aggravated dyspnoea. There is occasional spasmodic difficulty of breathing. He is a brass-founder by trade; has followed a steady regular course of life since a young man. His illness first made its appearance soon after Christmas last, commencing with influenza. Has been under treatment at different times; has been subject to neither fever nor dropsy. Ordered, R. Vini. Ipecac., dr. iij.; Tinct. Opii, dr. j.; Sp. Ætheris. Sulph., oz., ss.; Aq. Camph, oz. vii. M. Fiat Mist.; sum., oz. j., quartis horis. Two glasses of wine daily; beef tea, arrowroot, and meat daily.

June 27th. Passed a very restless night. Urine, of specific gravity, 1024, acid, contains no albumen. 28th. Continues much the same. 29th. Tongue dry and brown; complains of great thirst; is exceedingly weak; breathing more laboured; pulse irregular and thready. 30th. Died at half-past six o'clock, a.m.

Dissection.—Body emaciated. Brain and membranes healthy. Thorax:—Right pleura adherent at apex; left slightly so. Structure of right lung softened, greatly emphysematous, and distended with abundant dark frothy serum; left lung far more healthy, diseased after the same manner in parts; no tubercles. Heart weighed twenty-four ounces; pericardium contained no larger a quantity of serum than natural; was adherent for about an inch to the anterior aspect of the left ventricle. The left cavity showed the walls of the ventricle thickened, and the cavity increased. The mitral valves, with the cords, were greatly enlarged, edges irregular, and the cords twice their natural thickness; left auricle partaking of the general enlargement, otherwise natural. Walls of right ventricle atrophied; capacity increased; tricuspid, aortic and pulmonary valves healthy; sinus aorticus showed abundant atheromatous deposit. The right auricle, on its external aspect, presented its appendix greatly enlarged, dark, and to the fingers, evidently containing a firm material; the interior showed the cavity far larger than in proportion to the other parts of the organ, and the appendix filled up by a considerable deposit of dark-coloured fibrin, regularly deposited in layers, one over the other, as in an aneurism, and this evidently did not form a recent deposit. The coronary arteries were pervious to a large sized probe. Liver contracted in size. Kidneys small; structure friable; proper tunic preternaturally adherent; fatty under the microscope. Pancreas healthy; spleen soft and friable.

Dr. Fletcher said that this was a case of dilatation of the right side of the heart, and stagnation of blood, and consequent coagulation in the sacculated dilated appendix of the auricle, from impeded circulation through the lungs, in consequence of old disease.

Mr. Swain presented a diseased tibia, occurring in a boy, aged 16, for which amputation above the knee was performed. A portion of the bone was necrosed and loose, but was not quite separated.

MALIGNANT DISEASE OF THE LOWER JAW.

Mr. Alfred Baker gave the history and treatment of the following case:—

William Tomkins, aged 17, a tall, spare, and delicate-looking young man, was admitted into the Birmingham

General Hospital, on June 23rd last. He states that six months back he noticed a "little hard lump as big as a horse bean," about the centre of the right horizontal ramus of the lower jaw. It could not be moved or pinched up with the cheek, seemed to be firmly connected with the bone, and was quite free from pain. In about six weeks it had attained the size of a walnut, and became the seat of dull aching pain, which was constant, with lancinating pains which were only occasional. He now applied for surgical advice and had the swelling leeches and blistered. These measures seemed to arrest the growth for three weeks, when it again enlarged and began to project within the mouth so as to interfere with mastication. The pain at the same time became aggravated. Some iodine application was now made to the tumour. Shortly afterwards two of his molar teeth were found to be loose, and were extracted, and their removal was followed by considerable bleeding. The sockets from whence they were extracted were soon filled up by the diseased mass, which enlarged in a forward direction so as to displace the two teeth in front of those already removed. These last were taken out six weeks back, immediately after which the inner or oral portion of the swelling enlarged and advanced towards the commissure of the lips, whilst the outer or maxillary portion extended downwards to the neck, so as to form a tumour projecting from the jaw-bone as large as an orange, "and as hard as a stone." Since then, its extension has been most rapid in every direction. It has encroached upon the mouth so as to prevent him taking any solid food, and outwardly has enlarged so as to equal half a cocoa-nut in size. The pain has become severe, and in addition to a constant dull aching and sense of tension, he has violent lancinating paroxysms. Within the last few weeks the consistence of the mass has changed and become softer. The tumour has a broad base extending from the last right inferior molar tooth to the left canine tooth, and from the level of the teeth in the upper jaw, downwards over the neck so as to cover the right superior lateral cervical triangle. The basal portion is firm, elastic, and covered by healthy skin, whilst the apex which points downwards has a soft pulpy, and semifluid feel, and is covered by inflamed integument, and is of higher temperature than the surrounding parts. The mouth is kept open by the projection of the mass within, which reaches from the right last molar tooth forwards beyond the commissure of the lips, imbedding the right canine and incisor teeth; it fills up the space between the cheek and jaw, and occupies the right half of the cavity of the mouth, pushing the tongue to the left side. Its upper surface is deeply channelled by the pressure of the upper teeth. It is of an ashy-grey colour, of moderately firm consistence, and is the seat of several ulcerations from bruising by the teeth, and the attrition of such soft food as he can take.

July 5th, I this morning removed the growth, and the portion of the lower jaw to which it was connected, by an elliptical incision, extending from the angle of the mouth over the swelling to near the lobe of the ear, the ellipsis including the livid skin covering the apex of the tumour. Another incision was required, extending from the lower line of the ellipse at right angles to the left side of the

chin. The upper flaps were first reflected, the cavity of the mouth opened, and the bone sawn through behind, close to the last right molar, and in front, through the alveolus of the left canine. The mass thus loosened was now seized and drawn upwards, whilst the lower flap was dissected off, and the tumour, with the portion of jaw from whence it sprang, detached. From six to eight ounces of blood were lost during the operation. Five ligatures were applied, and the parts were brought together by sutures and strips of adhesive plaster.

The growth sprang from the cancellated tissue of the bone, into which it could be traced, having separated a fragment of the dense outer tissue of the jaw. The portion projecting over the neck was enclosed in a cellular capsule, which could not be traced over the part projecting into the mouth. Its section displayed two kinds of formation, the upper or oval part being indistinctly lobular, of yellowish white colour, and firm texture, whilst the lower or cervical part was one large lobe of pure white colour, lardaceous appearance, and so friable as to crush under slight pressure. The uniformity of its colour was only here and there broken by a few cells, containing blood, and a few patches and streaks, apparently resulting from ecchymosis.

SHEFFIELD MEDICAL SOCIETY.

Third Meeting, November 22nd, 1848.—The President, Dr. Bartolomé, in the Chair.

HYPERTROPHY OF THE LEFT VENTRICLE OF THE HEART; DISEASED AORTIC VALVES.

The President exhibited the heart of a man, aged 30, who was admitted into the Infirmary September 1st, 1848, when he presented symptoms of eccentric hypertrophy of the left ventricle and obstructive disease of the aortic valves, but, although carefully examined on four separate occasions, no other abnormal sound could be detected. The last examination was made seventeen days before death.

The *post-mortem* examination took place thirty hours after death. The heart weighed fourteen ounces and a half; the left ventricle was considerably hypertrophied and dilated; the aortic valves were opaque, thickened, and wrinkled, more particularly so at their edges, so as not quite to close the aortic orifice; on one of the segments of the valve was a slender vegetation, about one-eighth of an inch in length; the membrane lining the aorta presented considerable atheromatous deposit, but the extent to which this existed was not ascertained.

PENDULOUS TUMOUR OF THE LABIUM PUDENDI.

Mr. H. Jackson then detailed the particulars of a case of pendulous tumour of the labium pudendi, which by the kindness of Mr. Law he had lately seen, and removed. The records of such cases are comparatively rare, and he was on that account induced to place it upon the minutes of the Society.

Elizabeth B., aged 44 or 45, the wife of a pocket-knife cutler, (who for nine years has been an inmate in a

lunatic asylum,) has had six children, four of whom are now living. The eldest, now dead, was born twenty-four years ago. The youngest, still living, is now nine years of age. Her oldest living child is nineteen. Her husband, when able to work, earned good wages, but having been incapacitated for thirteen years, four years before he was placed in the asylum, she has supported herself and family on a very scanty income, derived partly from the parish funds, and partly from her own exertions as a washerwoman. The catamenia have always been profuse, but during the last five years she has, she thinks, been one-half her time unwell, the discharge generally continuing for about ten days, with an interval of cessation of a like duration. Otherwise her health has been very good.

In October, 1846, she first perceived a small tumour growing from the left labium, which steadily increased, and in the course of twelve months from being first discovered, had, she thinks, reached half its present bulk. About this time the lower and most depending surface became ulcerated, and a scanty discharge, of a sero-sanguineous character took place. She is unconscious of having felt sensation of any kind in the tumour until about four months ago, when she experienced pain, apparently resulting from the mere weight of the tumour, extending from it to the left groin, and downwards to the left thigh. It gradually increased, and became so much a matter of annoyance, that she could not follow her occupation of washerwoman, and she at length overcame her scruples, and mentioned it to Mr. Law, who advised her to come into the Infirmary, but she refused to do this, and he then kindly requested Mr. Jackson's assistance.

On examination a large tumour was found hanging down between the legs, suspended by a peduncle of at least two inches in length, to the upper and front part of the left labium. The lower surface was ulcerated. The tumour was irregular in shape, being in some places hard, and giving the sensation of being very irregular in structure. On seizing the peduncle between the finger and thumb, two arteries of considerable size were pulsating very evidently.

The question as to knife or ligature, as allowed by authors in these cases, seemed to be settled at once by the size of these two arteries, it being thought advisable to use the former when they would be more certainly secured by ligatures, and the frequent recurrence of menorrhagia, made it desirable not to incur the risk of losing any blood by secondary hæmorrhage. The patient acknowledged that she had frequently entertained the idea of cutting it off herself, but the fear of hæmorrhage had fortunately restrained her. The peduncle was removed by a single stroke of the scalpel. The two arteries were secured by ligatures; the edges of the wound were drawn together by two sutures, and covered by elastic-gum sticking plaster. The healing process was soon completed, but she has suffered from the usual menorrhagic symptoms, and is yet in a weak state from that cause, and the want of a sufficient nutritious support. The weight of the tumour was nine ounces and three quarters, and was of the usual fatty structure, here and there condensed. It was clearly not malignant, and contained no fluid.

The reader of the case exhibited three drawings of a

tumour taken from the upper portion of the labium of a female who came under his care in the Infirmary some years ago, presenting the appearance of hydrocele, being equally pear-shaped and smooth, and containing a considerable quantity of fluid, as shown by its transparency; but the patient would not submit to the slightest operation, and merely required a suspensory bandage, which she obtained, and the result was never known.

Mr. Ray stated that he had once had a tumour of a similar character to the specimen on the table under his care.

Foreign Department.

CLINICAL MEDICINE AND SURGERY IN THE CONTINENTAL HOSPITALS.

Nocturnal Incontinence of Urine: Blisters.—A young girl, aged 13, in good health, was admitted into the Hotel Dieu under M. Guerard, the subject of incontinence of urine from the age of four years. She wetted her bed every night during her dreams. M. Guerard applied a blister over the pubic region, the action of which effected a temporary cessation of her disgusting infirmity. The blisters were repeated with the same results, but it does not appear that a cure was effected.

Acute Rheumatism treated by Nitrate of Potash.—A man aged 30, convalescent from syphilis, was seized with fever and swelling of both knees with copious effusion of synovia. The patient had never previously been the subject of rheumatism, and it was at first doubtful whether the case was one of common or gonorrhæal origin. Next day, the joints of the upper extremities became affected, the knees were enormously enlarged, and the pulse got up to 100. M. Martin Solon prescribed six drachms of nitrate of potash in lemonade, to be taken during the day. The next day the amendment was considerable, the pulse fell to 80, and the swelling of the knee had diminished; the treatment was continued, and in two days more the joints were nearly of the natural size, and convalescence was established. Cases of this kind are said to be of daily occurrence in the wards of M. Martin Solon, who invariably treats acute rheumatism in this manner. The dose is sometimes carried to the extent of two ounces per diem. If there be accompanying endocarditis he takes blood from the arm. It is to be remembered that this salt is an energetic poison, and the health has been destroyed by one ounce; but the French physicians consider that in inflammatory disease a tolerance is established, which renders a dose of medicine salutary, which in health would be injurious.

Treatment of Severe Uterine Hæmorrhage by the Actual Caustery.—For many years M. Jobert has been in the habit of treating severe uterine hæmorrhage (in the unimpregnated state we presume,) by the actual cautery to the cervix. There are at this time in his wards six women, who were exsanguine and as it were dying, when the hæmorrhage was arrested by a single

cauterization, and they have now regained their flesh and colour. Of these, some were the subjects of ulcerated carcinoma; others laboured under hypertrophy of the cervix, with granular ulceration. A third variety treated by M. Jobert in his private practice, comprises those known as purpuric hæmorrhages.

The cautery which he uses is of a globular form, and is applied with the aid of a large ivory speculum, over the whole bleeding surface, and is held in contact sufficiently long to cause a deep eschar. The patient experiences no pain and the vagina is immediately washed out with cold water. From this time the hæmorrhage generally ceases for some days, but as the eschar becomes detached, leucorrhœa, and finally, hæmorrhage reappears. The cautery is then applied a second time, and produces the same effect. By this the hæmorrhagic tendency is further checked, and the fœtidity of the discharges much lessened. A third and future cauterization if necessary, becomes so at longer intervals. In the meantime the patient recovers her strength, and may take iron and quinine. The cancer is by the above means checked, but not cured, and if left to itself, the same symptoms would reappear, but it has been observed in many cases, that if the patients are occasionally examined, and fungous granulations checked by the cautery, life may be indefinitely prolonged. When the hæmorrhage depends upon simple hypertrophy with ulceration, a perfect cure is effected in two or three months. Passive hæmorrhages are treated by M. Jobert, by cauterizing the os and cervix, even though there be no ulceration.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DES SCIENCES, PARIS.

PLUGGING THE VAGINA IN UTERINE HÆMORRHAGE.

M. Velpeau read a report on the memoirs of MM. Miguel and Du Hein, on a particular mode of plugging the vagina in the hæmorrhages of pregnancy. The method consists in inserting a pig's or sheep's bladder furnished with a stop-cock, into the vagina, and inflating it with air or filling it with cold water. M. Miguel recommends that it should even be inserted into the womb itself in post partum hæmorrhage.

EFFECTS OF QUININE IN LARGE DOSES.

M. Briquet, presented a memoir entitled "Experimental Researches on the Properties of Quinine in Large Doses, and its Therapeutical Uses." By large doses, the author means from fifteen to thirty grains.

In his researches, the author studies in succession the effects of large doses of quinine on the principal organs of the economy, as for instance on the organs of circulation, on the nervous centres, organs of respiration, digestion, generation, &c.

According to M. Briquet, the organs of circulation present two especial modifications; the first which affects the number of pulsations of the heart, shews that these may be diminished from eight to forty beats in the course of a few days. The force of the pulse he

has studied with the aid of the hæmadynamometer of M. Poiseuille, applied to the carotid at the same time that quinine is injected into the jugular veins. He has thus ascertained that the force may be diminished in all degrees from one-tenth to complete annihilation, according to the dose injected, and that thirty grains is sufficient to cause immediate death. He has therefore concluded that quinine exercises a directly debilitating effect on the heart's action.

The brain and its dependencies exhibited different phenomena according as the quinine reached the brain directly or indirectly. When injected into the carotid arteries, it produced excitement, and in some cases convulsions followed by prostration, but if injected into the aorta, there was less excitement, and a more rapidly sedative effect.

The respiratory organs were not sensibly influenced; the digestive organs were slightly injected when a moderate dose had been given, and were vividly inflamed when large doses had been given several days in succession.

M. Briquet has never known abortion produced by quinine, as has been maintained by some.

From the study of the physiological action of quinine, the author deduces his views of its therapeutical value. Thus he supposes that from its power of reducing the pulse, it may be useful in the pyrexia in rheumatism, gout, erysipelas, and other diseases accompanied by high action. The action on the brain may be taken advantage of, in cerebral neurosis, periodic neuralgia, &c.

Children and young people are readily influenced by quinine, and its absorption is rapid, but they can bear larger doses than adults. Bleeding augments the susceptibility to the effects of quinine in a notable manner. After some further remarks on the action of opium and coffee, when given in conjunction with quinine, the author draws the general conclusions:—

1. That quinine depresses nervous power, especially that of organic life.

2. That it is a direct excitant of the organs with which it comes into contact, in this respect resembling æther and chloroform.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DE MEDECINE, PARIS.

ON CHLOROFORM INHALATION.

The sittings of this academy during the month have been mainly occupied with a discussion on a report by M. Malgaigne, on the fatal cases from chloroform inhalation. The author narrates each case which has occurred with minuteness and accuracy, and as the result of his enquiries determines, that it is an agent of great power; that it should not be exhibited in persons labouring under diseases of the lungs or heart, but that in healthy persons it is perfectly harmless when administered with due regard to proper dilution with atmospheric air, and to its withdrawal as soon as the signs of insensibility are apparent.

General Retrospect.

SURGERY.

IMPACTION OF A HALFPENNY IN THE PHARYNX FOR EIGHT MONTHS.

A boy, aged one year and eight months, came under Dr. Ward's care, June 23rd, when his breathing was so loud and stridulous that it resounded through the hall in which he was waiting. As soon as Dr. Ward saw him, the child began to cry so convulsively, and was seized with such violent coughing, that a close examination of his throat was impossible. He was pale and emaciated, and seemed decidedly phthisical. The glands of the neck were somewhat enlarged, and the chest sounded well on percussion. His mother observed that he was quite well and hearty till March 3rd, when she supposed he swallowed a halfpenny with which he was playing, as he began to choke immediately, and the coin could not be found afterwards, and from that moment his breath became stridulous. She was then in Coventry barracks, and she took him to the regimental surgeon, who, thinking it an attack of irritation from teething, merely gave him some castor oil. At this time, besides the dyspnoea, he was constantly dribbling a thick mucus, and he could only suck one mouthful of milk at a time, being forced to withdraw from the breast with each effort of swallowing. The mucus was so profuse as almost to choke him; and these symptoms, with an increasing cough, continued for three months, till a short time before he came under Dr. Ward's care, when the dribbling had almost ceased. The mother next took him to the Coventry Hospital, where the case was again considered to be laryngismus from teething, and was treated accordingly. Dr. Ward concluded that the bronchial glands were affected with tuberculosis, as well as those of the neck, and, pressing on the recurrent, were causing the stridulous breathing. He therefore prescribed an iodine liniment, and the syrup of iodide of iron. Under this treatment the child rapidly improved, with occasional relapses, and thus seemed to confirm his diagnosis, when, on October 25th, his mother brought him, looking comparatively well, and produced the halfpenny, which she said he had taken out of his mouth and put into his father's hand, after a severe fit of coughing, the day before. There is now, however, considerable hoarseness when he cries or coughs, the latter symptom not having ceased with the removal of the cause. The coin was much worn and corroded, and covered with a layer of dried mucus.—*London Pathological Society in Medical Gazette.*

MEANS OF RECOGNIZING THE SENSIBILITY OF THE RETINA IN CERTAIN CASES.

M. Cuhier, when he wishes to ascertain whether the retina retains its sensibility, compresses the eye-ball at one of its angles; if the luminous ring appears at the opposite corner, he decides that the sensibility of the retina is perfect, if it does not appear, the contrary is presumed. M. Cuhier has never observed this effect of lateral pressure in amaurosis, but it is present in cataract

and other defects of vision depending upon diseases of the transparent media of the eye.—*Annales d'Oculiste*, Avril, 1848.

OBSTETRIC MEDICINE.

PROLAPSE OF THE GRAVID UTERUS DURING LABOUR.

By E. T. Watson, M.D.

On Thursday, the 13th of January last, about eight o'clock in the morning, Dr. Watson was called in haste to visit Mrs. C., aged about 22 years, in labour with her first child. On arriving at the house he found her in charge of two midwives, who had been with her the greater part of the preceding night. The patient was lying on the floor, with a few bedclothes under and over her. Being requested to examine the case and do something immediately for the relief of the patient, as the midwives and friends were very much alarmed at her condition, he found the uterus entirely without the vulva, containing a fœtus at full term of uterogestation. When placing his hand on the uterus, he found it dry and ecchymosed in several places on the body and fundus, with the os uteri dilated to about the size of a twenty-five cent piece, and very thick, firm and unyielding, with the scalp slightly projecting through the orifice. Upon enquiry, he learned that early in the night the patient had been taken in labour, and the midwife first called to the case finding something unusual exhibiting itself, desired a physician to be sent for; the friends objecting, they sent for the second midwife, who thought herself able when she arrived to surmount every difficulty, and bring the labour to a speedy and successful termination. But after exhausting all her skill, and making the case no doubt a great deal worse by her efforts for delivery, she then advised the friends to send for a physician with all possible speed. Dr. Watson had the patient taken up and placed in bed as soon as possible, and applied linen clothes, rung out of warm water, to the uterus, and sent for Dr. J. S. Bracken to come to his assistance and bring the necessary instruments for delivery, having none with him but a common case of midwifery instruments and a small scalpel or two. After several applications of the linen (which were renewed every five minutes,) he found the uterus began to act, and with such force as to give strong fears that a laceration of the organ might take place. The pains, though frequent and very strong, had no effect in enlarging the os uteri. Deeming the case too urgent to wait any longer for the arrival of Dr. Bracken, he determined to divide the neck of the uterus longitudinally, and for that purpose introduced his finger in the absence of pain, and with a common scalpel, the finger serving as a director and also protecting the scalp of the child, divided the neck to the extent of three-quarters of an inch or more. Another pain soon came on, which caused but little dilatation. Owing to the cartilaginous condition of the cervix, he thought it best to make two other incisions, about equidistant from the first, and to about the same extent; after which, the pains having returned, the fœtus was expelled in a state of asphyxia, but by repeated inflation of the lungs and using the common restoratives, it was soon discovered to breathe, and in

a short time cried out lustily, to the gratification of mother and friends. The placenta was soon delivered without difficulty or hæmorrhage, the uterus contracting firmly, as though it had been in its proper position. By this time Dr. Bracken having arrived, and having examined the case—the parts being cleansed—Dr. Watson then returned the uterus to its proper position, applied a large piece of sponge, well oiled, to the vagina, and secured the same by the application of a T bandage. The woman perfectly recovered.—*Philadelphia Examiner*, April, 1848.

TOXICOLOGY.

POISONING BY ARSENIC: SYMPTOMS DELAYED.

[The following case, which is of the utmost importance in a medico-legal point of view, is reported by Mr. Clegg, of Boston.]

On Sunday, August 27th, at four o'clock in the afternoon, a woman requested me to visit her niece, who had taken poison. Her own suspicions had been aroused a few minutes before, by finding a white powder at the bottom of a cup when she was preparing the tray for tea. She accused her niece of attempting suicide, and the girl sullenly admitted having taken a teaspoonful of "white mercury" before dinner—that is before half-past twelve o'clock.

I accompanied the woman, and found a heavy stupid-looking girl, aged 17 years, sitting in a chair, more asleep than awake. On being roused she reeled about the room as if intoxicated; indeed, I at first suspected poisoning by a narcotic. But a paper parcel was brought to me evidently containing arsenious acid, and from this parcel the girl declared she had abstracted and swallowed the poisonous dose. She appeared to be in no distress; she had no acrid eructations; no burning pain in the throat or at the epigastrium; no vomiting; no diarrhœa. She had been once sick after dinner, but now the stomach was not irritable. All she desired was to be allowed to go to sleep; and narcotism appeared to be the only present symptom (if symptom it may be considered,) of poisoning by arsenic.

The sulphate of zinc soon produced free vomiting, which was maintained for half an hour, mucilaginous drinks being also administered. At the expiration of this time, Mr. Small, another medical man, arrived with a jar of the hydrated peroxide of iron; and, having a very pressing engagement, I left the patient with my friend, who administered large doses of the antidote. At nine o'clock the same evening we visited her both together. She was in bed, making no complaint, and disposed to sleep quietly. The belly was not tender; diarrhœa was still absent, and all vomiting had ceased.

At ten o'clock the following morning the aunt called upon Mr. Small to inform him that her niece was quite well: "Might she go a gleanng." Up to half-past eleven o'clock the girl continued more than ordinarily cheerful, and was busied in preparing the family dinner. At half-past eleven o'clock she suddenly complained of an excruciating pain in the body, with excessive prostration of strength. She went to her bed-room to lie down, and at twelve o'clock was discovered dead, having fallen by the bed-side. How many minutes she lived

after the first expression of pain, and the nature of the symptoms immediately preceding dissolution, I am unable to relate; but, as she was never heard to move or to speak after going up stairs, I am of opinion that she was just able to crawl to the side of her bed, and died instantly. Thus the fatal result occurred in about twenty-four hours after taking the poison, and within half an hour after the first decided symptom of poisoning was manifested.

Sectio cadaveris, forty-eight hours after death. The mucous coat of the stomach was much corrugated; the stomach itself appeared small and contracted, and numerous reddish-brown patches were diffused over the inner surface; the peritoneal coat was not affected. Slight traces of inflammation were apparent in the duodenum and intestines. Six ounces of a thin, shreddy, brownish-coloured fluid were removed from the stomach for the purpose of analysis; and I may add, briefly, that the vomited matter, the fluid removed from the stomach after death, and the fluid in which the stomach and first part of the intestines were boiled, most carefully tested by Mr. Small and myself, yielded abundant evidences of the presence of arsenic.

Observations.—This case is one of exceeding interest in a medico-legal point of view. In ordinary cases the symptoms of poisoning by arsenic are manifested within half an hour; very rarely have they been delayed for one hour. Two, three, and four hours have, however, been known to elapse. Orfila relates a case in which symptoms were delayed for five hours, and then but feebly developed; the patient died, nevertheless, within nine hours; and this case he considered the most extraordinary on record. The trial of Mary Smith, at Edinburgh, in February, 1827, may also be cited. Poisoning by arsenic was undoubted, "but," says Christison, "the symptoms did not begin till more than eight hours after the only occasion on which the prisoner was proved to have administered anything in a suspicious manner:" upon this evidence she was acquitted. In the late editions of his "Treatise on Poisons," Dr. Christison observes, in reference to this case, "The intervening state of sleep probably affords an explanation of the long interval, and I am not sure that I should now feel the same difficulty."

These circumstances considered, I have thought it highly important to place upon record the case above related, as it demonstrates clearly that arsenic, in a dose sufficient to produce death, may remain in the stomach for a period of *twenty-three hours* without producing the well-known decided symptoms. One observation more I think it requisite to make. The lower classes in Lincolnshire are much addicted to the abuse of opium, and I have reason to believe that this girl was a laudanum-drinker. It has since occurred to me that her case might be an example of compound poisoning. Is it possible that the action of one poison could so far mask the evidences of the other? Did the opiate suppress the intolerable agony which ordinarily attends the administration of arsenic, whilst it possessed not the power to interrupt or prevent the deadly result?—*Medical Times*, Oct., 1848.

PROCESS FOR THE MORE CERTAIN DETECTION
OF ARSENIC.

Dr. Geoghegan proposes the following procedure by which a given quantity of arsenic may be transferred undiminished to each of the fluid tests in succession. As minute precautions in manipulation vitally affect the result, he premises that want of success in the application of the fluid-tests to small sublimate, sometimes arises from not reducing the latter to powder before attempting their solution. The sublimate being carefully detached by a glass rod, aided by a fine stream of distilled water, should be received in a small porcelain mortar, and carefully triturated. The solution having been effected by boiling, should (1) be precipitated when cool, by ammonio-nitrate of silver. The yellow arsenite obtained is to be next decomposed by a slight excess of pure hydrochloric acid, and the filtered solution treated (2) by a current of sulphuretted hydrogen. Having ascertained the solubility of the resulting sulphuret in ammonia, it should now be dissolved in nitro-muriatic acid, and evaporated to dryness, (avoiding excess of heat at the close,) re-dissolved and precipitated (3) by nitrate (or ammonio-nitrate) of silver, which yields the brick-red arseniate (4.) Finally, the latter being decomposed by hydrochloric acid, in minimum quantity, the filtrate should be heated with a few drops of an aqueous solution of sulphurous acid, the excess of the latter expelled, and hydrated oxide of copper, with ammonia, in minute quantity, added. We can thus elicit the reactions of the *four* fluid tests from a quantity of arsenious acid which would prove refractory by the common method of subdivision, and are hence enabled to ensure a satisfactory issue in difficult cases. The final step of the operation is not always successful, the ammonio-sulphate of copper being, even in experiments on larger quantities, a much less delicate test than those previously named. Having obtained, however, the antecedent results, the evidence of the presence of arsenic may be deemed complete. Modifications of the foregoing method will at once suggest themselves, and may be adopted at pleasure. It may occur to the instructed reader, that the success of the copper test might be secured by re-precipitation and sublimation of the arsenic subsequent to the formation of arsenite of silver; as, however, there is reason to believe that no inconsiderable portion of the metal is often retained by the copper foil as an arseniuret, this procedure is not to be recommended.—*Medical Gazette*, October 6th, 1848.

ACUTE LARYNGITIS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND
SURGICAL JOURNAL.

SIR,

I cannot resist writing to corroborate the truth of Mr. Norman's observations on the case of acute laryngitis, inserted in your last number. A precisely similar case occurred in my practice last summer, with the exception that the sufferer was a woman. It is not necessary to go into details, for the above reason, the

patient being also treated on the same plan, except the venesection, which did not appear admissible from the depression observant at the time. I confess to you, prior to the fatal termination of the case, notwithstanding the absence of urgent symptoms justifying such a measure, I had nearly proposed the operation. Now, that such an authority as Mr. Norman has suggested it, should I meet with another case of a like nature, I should, were it permitted, unhesitatingly resort to tracheotomy. Happily, laryngitis is a very rare affection, but being also so fatal, I have felt justified in taking the liberty of drawing the attention of the profession, through your widely spread Journal, to the necessity of adopting Mr. Norman's suggestion in this intractable disease, and thereby, perhaps, removing another stigma from the value and usefulness of our noble profession.

I am, Sir,

Your obedient servant,

W. A. RACKHAM, M.R.C.S.E., &c.

Wangford, Suffolk, January 16, 1849.

NOTICE OF THE LATE DR. JAMES COWLES
PRICHARD, F.R.S.

Dr. Prichard, who was born at Ross, in Herefordshire, settled as a physician in Bristol, in the year 1810, and was a few years after appointed physician to the Clifton Dispensary and St. Peter's Hospital. In addition to his professional avocations, he occupied himself, at this period, in writing the first edition of his "Researches into the Physical History of Man," which appeared in 1813, and his work upon "Egyptian Mythology." In the year 1816, he was elected Physician to the Bristol Infirmary, which appointment he filled in conjunction with that of Physician to St. Peter's Hospital; and in the year 1822, he published a work on the "Diseases of the Nervous System." In 1829, he wrote a small octavo work, entitled "An Essay on the Vital Principle," dedicated to the patrons of the Bristol Philosophical Institution, of which he was one of the founders, and where he frequently gave lectures, and read papers on various subjects. He also took an active part in founding the Bristol College, and was, for many years, one of the members of its council. The degree of Doctor of Medicine of the University of Oxford was conferred upon him, by diploma, upon the occasion of his reading the Anniversary Address at the meeting of the Provincial Medical and Surgical Association, held in that city, in the year 1835. Dr. Prichard was one of the Visiting Physicians of the Gloucestershire Lunatic Asylum, and a Metropolitan Commissioner in Lunacy before his appointment under the recent Act. About this time he wrote his work on "Insanity," a book upon the "Eastern Origin of the Celtic Language," and a little volume on insanity, as connected with jurisprudence, and contributed various articles to the "Cyclopædia of Practical Medicine," and the "Library of Medicine." In the year 1845, he was appointed one of her Majesty's Commissioners in Lunacy, and removed to London, where, besides the active duties of

the commission, he completed the third edition of his "Physical History of Man," in five volumes, as well as his popular work on the "Natural History of Man." He was a Fellow of the Royal and a great number of British and Foreign Societies, and at the time of his death was President of the Ethnological Society of London. In his intercourse with his professional brethren and colleagues, Dr. Prichard's conduct was straightforward, honourable, and generous; to his patients he was gentle, attentive, and kind. High moral and religious principle, an affectionate disposition, an instinctive sentiment of delicacy, propriety, and consideration for the feelings of others, together with a retiring modesty and simplicity of deportment, as much distinguished and endeared him in the domestic and social relations of life as his literary and scientific attainments have elevated him to the eminence he held in public estimation. He furnished, indeed, a bright example of the scholar, the gentleman, and the Christian.

Medical Intelligence.

APPOINTMENTS.

J. F. South, Esq., the Translator of *Chelius' Surgery*, and one of the Surgeons of St. Thomas' Hospital, was elected a Member of the Court of Examiners of the Royal College of Surgeons, at the meeting of the Council, on the 11th instant, in the vacancy occasioned by the lamented decease of Mr. Samuel Cooper.

William Fergusson, Esq., Professor of Surgery in King's College, has been elected Consulting Surgeon to the Hospital for Consumption, in the room of Mr. Liston, deceased.

John Bleack, Esq., has been appointed Surgeon to the Bristol Gaol, in the room of George Hetling, Esq., resigned.

Samuel Gaskell, Esq., F.R.C.S., and lately the Superintendent of the Lancaster County Lunatic Asylum, has been appointed by the Lord Chancellor, a Commissioner in Lunacy, in the room of Dr. Prichard, deceased.

HUNTERIAN ORATION.

The Hunterian Oration for 1849 will be delivered on the 14th of February, by Cæsar Hawkins, Esq., Surgeon to St. George's Hospital.

ACADEMIE DES SCIENCES, PARIS.

M. Boussingault has succeeded as President of the Academy, for the year 1849. M. Duperrey has been elected Vice-President, in the room of M. Boussingault.

Sir D. Brewster has been elected a Foreign Associate, in the room of M. Berzelius, deceased, by a considerable majority, Messrs. Tiedemann, Mitscherlich, Ehrenberg, and Melloni, having been also put in nomination.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members, Friday, January 12th:—W. S. Love; J. Bull; W. Bell; J. A. Bolton; W. E. Jefferys; W. Briscoe; A. G. H. Buckby; T. Wade.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, January 11th:—James Mitchell, Nottingham; Henry Edward Turnour; Charles Newth Foote, Sheffield; George Tootal Nicholson, Sheffield.

OBITUARY.

Died, December 30th, at Altrincham, Cheshire, aged 66, Samuel Hibbert Ware, M.D., F.R.S.E., &c.

January 6th, aged 79, Charles Edward Clarke, Esq., formerly Assistant-Surgeon in the Coldstream Guards.

January 9th, at Colchester, aged 57, William Byass, Esq., Surgeon, late of Worthing.

January 14th, in Portland Road, aged 56, John Pratt, Esq., Surgeon.

BOOKS RECEIVED.

Dissertation on Scientific Nomenclature, Medical and General, &c. By R. G. Mayne, M.D., Surgeon to the Leeds Lock Hospital. London: Churchill. 1849. 8vo. pp. 82.

Demonstrations of Anatomy, being a Guide to the Knowledge of the Human Body by Dissection. By George Viner Ellis, jun., Professor of Anatomy in University College, London. Second edition. London: Taylor, Walton and Maberly. 1849. 8vo. pp. 464.

An Essay on the Cerebral Affections occurring most commonly in Infancy and Childhood: &c. By Valentine Duke, M.D., Fellow of the Royal College of Surgeons in Ireland, &c., &c. Dublin: Fannin and Co. 1849. 8vo. pp. 90.

A Sketch of a Popular and a Novel Treatment for Diarrhœa, Dysentery, and English and Asiatic Cholera. By Edmund Skiers, M.D., &c. &c. London: Highley. 1849. 8vo. pp. 91.

The Retrospect of Medicine. Edited by W. Braithwaite, &c., Vol. xviii., July to December, 1848. London: Simpkin and Marshall. 1848. pp. 468.

The Half-Yearly Abstract of the Medical Sciences, &c. Edited by W. H. Ranking, M.D., Cantab., &c. Vol. viii., July to December, 1848. London: Churchill. 1849. pp. 424.

TO CORRESPONDENTS.

Communications have been received from Mr. Spooner; the Birmingham Pathological Society; Dr. Radclyffe Hall; Mr. J. S. Bartram; Mr. G. M. Humphry; Mr. L. F. Cumming.

The General Medical Annuity Relief Fund.—We regret that we are unable to insert the address in behalf of this Fund in the present number. We shall hope to find room for it in our next.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON SURGERY,

DELIVERED IN THE
MEDICAL SCHOOL OF CAMBRIDGE.

By GEORGE MURRAY HUMPHRY, Esq., Downing
College, Surgeon to Addenbrooke's Hospital.

LECTURE II.

Destructive Inflammation; Changes in Vessels, Blood and Tissues, may be confined to any one, but generally occurs in them all; Effusions of Serum, Lymph, Pus, Colouring Matter of Blood, Pigment; Influence of Nervous System on Inflammation; Inflammation most vigorous in strong Persons, most easily excited in weak Persons and in loose Tissues; Symptoms of Inflammation; Pain, Cause of, Circumstances under which it Varies, Effect of Pressure; increased Heat, Cause of; Redness; Swelling; Alteration or Suspension of Function; Variation of Symptoms and Effects of Inflammation.

The condition of active congestion, or the first stage of inflammation, I described in the last lecture to consist in a mere exaltation of natural forces, often occurring to effect some desirable end, and to be regarded as morbid only when it exists without a sufficient natural exciting cause. When the stimulus is removed, the hyperæmic state commonly soon subsides, the circulation becomes more tranquil, and the vessels resume their usual size. Sometimes it ceases suddenly, an exhalation of serum taking place from the capillary vessels, which seems to be somewhat of the same kind as the critical sweat in fever.

If the exciting cause be continued, the phenomena of destructive inflammation, or inflammation strictly so called, probably begin to exhibit themselves; the action ceases to consist simply in an exaggeration of natural processes, for other changes more clearly of a morbid nature are observed. One of the earliest and most remarkable of these is the adhesion of the red globules, which, instead of floating separately and quickly in the middle of the capillary streams, begin to stick together, and to the sides of the vessels, forming by their agglomeration little masses, which more or less retard the current. Soon their connection with one another is so close, that they seem to have lost their individuality, and to become fused. Some of the colouring matter may be, at the same time, dissolved out of them, and mixed with the serum. The distended vessels, which before had tightly embraced their

contents, become relaxed, the circulation is carried on more slowly through them, the motion of the blood becomes irregular, oscillating or completely stopping. At the same time that this retardation or stoppage of the flow of blood is taking place in the centre of the inflamed part, the circulation may be still maintained with preternatural rapidity in the circumference. If the inflammation ceases when matters are in this condition, the globules again separate from one another, shewing that their fusion had been but apparent, the stagnant blood begins to oscillate again, and yielding to the *vis a tergo*, moves forward. The vessels resume their natural size, and the inflammation is said to terminate by resolution.

The increased attraction of the red globules for one another, may be observed in the blood which has been drawn from an inflamed part, and is so characteristic a sign of the disease, that the quick adhesion of the globules into rolls and masses, in a drop of blood placed under the microscope, is, of itself, sufficient evidence of the existence of inflammation. The mottled appearance of inflamed blood when spread over a wide surface, caused by this peculiar change in its globules, did not escape the observation of John Hunter, who remarks that the "red blood attracts itself forming spots of red."

The other changes occurring in inflamed blood are a diminution in the number of the red globules, an increase in the white globules, and a proportionate increase in the quantity of the fibrin, which has undergone certain alterations in its qualities. Its specific gravity is less, and its great disposition to coagulate and become transformed into tissue, proves it to be endued with higher vitality than usual. The fibrin of inflammatory venous blood is also insoluble in nitrate of potash, in which respect it resembles the fibrin of arterial blood.

In what relation these several changes stand to one another, is not very certain. It may be that the unusual formation of white globules is taking place to supply the deficiency of the red globules, which, on the other hand, are undergoing rapid transformation into fibrin, possessing great force of organization. The process still seems to consist, in part at least, in an exaltation of the natural forces, but it takes place in a disorderly manner, some of the changes being out of proportion to the others, some are of a new or morbid nature, and the whole is uncalled for by the existence of any natural stimulus of nutrition. Far

from there being an increased demand on the part of the tissues to call forth such rapid formation of highly-wrought fibrin, their nutritive powers are commonly weakened in consequence of the existence of the inflammation, for we shall find as we proceed, that the impairment of the nutritive energies of the tissues is one of the most constant and most important effects of the second stage of inflammation. It must be remembered, too, that this modified fibrin is ill fitted to supply the material for healthy nutrition, in proportion to its deviation from the ordinary or healthy state. The perfection of nutrition depends upon the due relation between the coagulating property of the fibrin, and the assimilative influence of the tissues, and the increase in the independent force of organization of the fibrin, necessarily renders it less amenable to such influence, particularly when the nutritive energies of the part are weakened by the inflammation. Adhesions, thickenings, and a variety of new formations, are the consequence of this disordered state of the nutritive functions; the altered fibrin bids defiance to the laws of nutrition, and uncontrolled, or but little controlled, by the weakened assimilative forces of the tissues among which it is effused, coagulates and becomes developed into structures, which have no exact counterpart in the natural condition of the body.

While these changes are going on in the blood, the dilated and relaxed condition of the vessels permits the transudation through them of the constituents of the liquor sanguinis, in greater quantity than natural, which takes place probably in consequence of the altered mechanical condition of the parts concerned in the circulation. The minute vessels are preternaturally distended, and are beginning to lose the proportionate increase of those forces, of whatever kind they be, which had been maintained during the first stage of the inflammation, by which the current was accelerated in them, and the filtration of the constituents of the blood through their walls regulated. At the same time the pressure of the blood upon their stretched and weakened walls has undergone no diminution, because the excited action in the adjacent vessels is continued, and the force of the heart's pulsation is as great as ever. It is no wonder, therefore, that their contents escape in preternatural quantities.

The serum first escapes, and passing from point to point in the interstices of the areolar tissue, may extend to a considerable distance, causing, perhaps, œdema in the whole limb, of which a small part only is inflamed. This occurs most largely in loose structures, and in weak persons. The serum carries with it the saline ingredients of the blood. The filtration through the walls of the vessels of the serum and salts before the other constituents of the blood, accords with the results of experiments made to test the permeability of animal membranes, for it is found that water with saline matters dissolved in it will pass through these structures more quickly than when it is mixed with viscid, gummy, or albuminous substances.

Some of the fibrin soon follows, and becomes diffused in the adjacent areolar tissue, but does not travel far, because it soon coagulates, and evinces its tendency to organization by the commencement of

cell-formation in this unnatural position. A quantity of cells called exudation-corpuscles are formed in the interstices of the tissues, and these cells originating on the exterior of the vessels, often resemble very closely the pale corpuscles which are accumulating in such abundance within them; perhaps they are of the same kind, having undergone some little change, in consequence of their position. However this may be, the coagulation of the effused and altered fibrin, or lymph, as it is now called, blocks up the interstices of the areolar tissue, and gives rise to an indurated condition of the inflamed part. By further development it is sometimes transformed into a structure nearly resembling the areolar. As the inflammation proceeds, some of the fibrin, still further modified by the morbid process, is formed into round or oval granular corpuscles, differing from the exudation cells in their appearance, but more particularly in their inability to undergo any further transformation into tissue; they stand, therefore, in the same relation as foreign bodies. These corpuscles floating in the liquor sanguinis, constitute pus, and this pus enclosed in the previously effused and coagulated lymph, is called an abscess. To these effusions of serum, lymph, and pus, I shall again revert at greater length.

I have said that during inflammation the red corpuscles seem to lose their individuality, and the colouring matter dissolved out of them, and mixing with the serum, may escape through the walls of the vessels. Occasionally the red corpuscles themselves pass through the distended or lacerated vessels, and lodge in the interstices of the tissues. When either the colouring matter or the corpuscles have thus escaped from the vessels, the inflamed part presents a mottled-red hue, and the colour cannot be removed by pressure, as it may be when it depends only on the greater quantity of blood in the vessels. This effect of inflammation varies much in different cases; it takes place most readily in persons advanced in life, or of feeble or disordered constitution. You have probably observed how frequently the pus evacuated from the abscesses of such persons is of a red colour. Sometimes the colour becomes set, and gives rise to those brown or fawn-coloured spots and streaks which mark the seat of former inflammation, or, perhaps, of scorching, in the legs of old people.

The spots of darker hue occasionally found, and looking as if the skin had been stained with nitrate of silver, seem to result from the deposit of pigment caused by inflammation; they are commonly permanent, the colouring material not being again absorbed. The track of an old sinus is sometimes stained of a dark colour in this way, and after chronic inflammation of the bowels, the mucous membrane of the intestinal canal is occasionally covered with minute black spots, looking as if soot had been sprinkled over it.

Finally, the texture of the inflamed part undergoes alterations, independently of those caused by the effusion of new products into its interstices. The changes, dependent, not simply on the altered qualities of the blood, but in part the effect of an impairment of the vital powers of the tissues, produced by the inflammation,

are,—first, diminution of nutritive or reparative energy, associated with preternatural rapidity of dissolution, giving rise to atrophy, softening, interstitial absorption; and, secondly, loss of vitality or death of the part, causing ulceration or mortification, according to the mode in which it takes place, whether piecemeal, or *en masse*.

Such are the more important changes which mark the second stage of inflammation:—Continued distension, but lessened activity, of the minute vessels; diminution in the number and loss of the repulsive qualities of the red particles; increase of the number of white globules; increased quantity and altered quality of fibrine, and impairment of the nutritive forces of the tissues.

You see, therefore, that the inflammatory process is not confined to any one of the agents of nutrition,—to the blood, the vessels, or the textures, but that it usually involves them all, in a greater or less degree. I do not mean to say that it is essential to the existence of the process that all three should share in it; forasmuch as it may occur in the blood alone, without involving either vessels or textures, and it may be present in textures which have neither vessels nor red blood supplied to them,—that is to say, the phenomena of inflammation peculiar to each of the three great agents in nutrition may occur in one alone, without either of the others participating in them. For instance, the adhesion of the globules, the alteration in the qualities of the fibrin, and the formation of pus, may take place in coagula, removed from the influence of the capillary system; and the evidences of inflammation, effusions of lymph and pus, softening, ulceration, and mortification, may be observed in the substance of the cornea, which has neither vessels nor red blood. These changes in the cornea are, it is true, commonly associated with inflammatory disturbance of the conjunctival and sclerotic vessels, which supply the materials of nutrition to that texture, but they sometimes exist without any such increase of vascularity, and are often the precursors and cause of that inflammation of the surrounding tunics, on which they are supposed to depend. Again, the excited action of vessels, existing and continuing for a time, without any other concomitant inflammatory symptom, is so ordinary an occurrence, as scarcely to attract notice. This occasional limitation of the effects of inflammation to each of the three agents commonly participating in it, is of much interest, and clearly shews that to be a very narrow and mistaken description of the process, which represents it as consisting merely or chiefly in an altered condition of the vessels. To obtain a right apprehension of the inflammatory process, it is necessary to take a more comprehensive survey of the changes which accompany it than such a description would induce, and to regard it as consisting in an altered or morbid condition of blood-vessels and textures, commencing in either, but commonly involving them all.

Upon what this morbid condition actually depends, by what influence the adhesion of the red globules, the dilatation of the vessels, and the changes in the textures, are produced, and how these effects are related to one another; what, in short, is the *rationale*

of process, we are at present unable to say. In the same sense that we use the terms life, assimilation, &c., to express the unknown forces whereby certain effects are produced, so must we be content to signify, by the word inflammation, that equally recondite influence which gives rise to the various phenomena indicating its presence.

I have thus far made no allusion to the part which the nervous system plays in the processes of inflammation; that it does exert some influence can scarcely be doubted, but as the connection between the nervous system and nutrition are at present but imperfectly understood, we must not expect to arrive at any very clear ideas of the mode of operation of nervous agencies in the production or modification of inflammation. The existence of animals and textures, in which no traces of nerve-structure can be found, is, perhaps, sufficient to shew that nervous influence is not essential to nutrition; but that a nervous system, whenever present, does exert an important controlling or regulating influence upon nutrition, is equally proved, by the numerous instances in which parts have been unable to maintain their natural condition, when deprived of nervous agency. The wasting of limbs paralysed as to motion, by disease or injury of the spinal cord,—their more rapid wasting and liability to inflammation, ulceration, and mortification, when the sensitive influence is in addition suspended,—the destructive inflammation of the eye, consequent on division of the fifth pair of nerves, which is said to follow most rapidly if it be made in front of the Gasserian ganglion, so that the sympathetic filaments are involved in it, seem to show that the three kinds of nerves, the sensory, motor, and sympathetic, are alike capable of exerting their influence on nutrition. The well-known effect of nervous agency in controlling nutrition is also in favour of the same view.

The inflammatory process being but a modification of nutrition, is probably in like manner, and to the same extent, subject to nervous influence. Indeed, the evidence of the operation of nervous agency in nutrition derived from the experiments above quoted, is founded chiefly upon the observation of the inflammatory disturbance consequent on its suspension. Many examples of the same kind might be adduced, but I will mention only that well-known one of the inflammation occasioned in a paralytic limb by water, heated to a temperature insufficient to injure the opposite sound extremity. If such results be shown to follow the *suspension* of nervous influence, it is not improbable that disturbances of an inflammatory kind may be produced also by an extraordinary *accession* of the same, from excitement or other cause. The effect of the emotions upon the circulation through the heart and capillary system is obvious enough, and would no doubt operate prejudicially upon a part already inflamed. That nervous irritation, as it is called, sometimes induces, as well as contributes to, the maintenance of inflammation, is rendered highly probable, if not proved, by the sympathetic affections, which are of such constant occurrence. I know not in what other way to explain the attacks of inflammation of the brain consequent on teething and worms in

the bowels, or a still better instance, the frequent association of inflammation of the testicle with gonorrhœa, than by supposing that the irritation is communicated from one part to the other through the medium of the nervous system.

Possibly the extension of inflammation from point to point along a surface, and from one tissue to another in its immediate vicinity, may be in some measure due to the radiation of nervous irritation occasioned by it, in addition to some direct influence of an assimilative kind upon the surrounding nutritive forces, inducing in them a change similar to that which exists in the part first affected.

The inflammatory being a modification of the nutritive and vascular processes, is carried on most actively where they are in greatest force,—where the vascular system rather predominates, in strong and plethoric persons, and in textures rich in blood-vessels. Its activity and the well-marked character of its products are a fair criterion of the vital energy of the individual and of the organ in which it occurs. On the other hand, where the vital powers are feeble, it is languid in its progress and its products are ill formed. Hence the slight amount of inflammation which is sometimes observed to follow serious lesions of important organs, which have been attended with great constitutional depression, and the fact that vesication does not follow the application of a blister when the patient is falling into a state of collapse.

Although the disturbance of the nutritive and circulatory processes attending inflammation, is most clearly developed where those processes are usually conducted with the greatest energy, it is nevertheless, most easily excited, and its effects are most destructive, in the tissues of low vital force, in feeble persons and in the lower extremities—in the parts last developed and most distant from the centre of the body. Hence the frequent occurrence of troublesome sores and mortification in the lower extremities of old persons, the rapid formation of bed-sores in paralysed limbs, and the frequent occurrence of ulcers and other inflammatory affections in parts which have been weakened by disease or severe injury. A considerable number of persons whose health is broken and strength failing under the effects of long-continued and wasting disorders, are carried off by some attack of inflammation of the skin, lungs, liver, or other parts, which runs into its most destructive stages before we are well aware of its existence. Patients with cancerous affections of the breast, rectum, or œsophagus, often die suddenly and unexpectedly, on having caught cold, which under ordinary circumstances would soon have passed away, but in their enfeebled state, is quickly followed by pneumonia or gangrene of the lung.

Cæteris paribus, tissues of loose structure are most liable to inflammation. It is of frequent occurrence, and soon runs on to suppuration, in the areolar structure, especially in that of the axilla, around the anus, and in other similar situations. It affects the back of the hand and foot, more readily than the sole and palm; and erysipelas of the face generally commences, and spreads most quickly, in the fine loose skin about the eyelids, bridge of the nose, cheeks, and

ears, and does not extend, except in severe cases, to the tougher parts of the integument from which the hair grows—the lips, chin, and scalp.

Let us consider briefly the local symptoms of inflammation, as they are presented to us in case of inflammation of the finger, originating, it may be, in a prick or slight wound. The first indication of commencing mischief is pain, of an aching or burning character; it keeps the patient awake during the night, and extends from the finger up the arm to the shoulder. In the morning the finger is found to be red, somewhat swollen, and hotter than natural; the pulse at the wrist beats with greater force than on the opposite side; and the veins of the finger and hand are turgid. The symptoms increase, more particularly the swelling, which becomes firm at the centre of the inflammation, but remains soft in the circumference, and is diffused over a considerable part of the limb. By and by the pain alters in character, becoming heavy and throbbing, even more insufferable than before. In the centre of the hard swelling, a soft spot is discovered, from which we infer that suppuration has commenced; the soft spot increases in size, so that the presence of fluid, or fluctuation, is distinguishable by the touch; at the same time the surrounding induration and cedematous swelling begin to diminish, as though the disease were concentrating its forces upon the centre, where the pus is being formed. Gradually the parts intervening between it and the surface become thinner, and are raised by the pressure of the pus, the white colour of which may be seen through them. Ultimately they give way, affording a vent to the pus, and much relief to the patient. It seems as though the object of the inflammation were now accomplished, for it gradually subsides, its effects are removed, the discharge soon ceases, the orifice is closed, and the hand is restored to its natural condition.

Such is the ordinary course of an attack of phlegmonous inflammation, or inflammation of the cellular tissue of the hand, when the progress of the affection is quick, and the formation of an abscess takes place, the four symptoms which most especially attract our attention being pain, redness, heat, and swelling. Of these, the pain is generally the precursor, and cannot, therefore, be a consequence of any of the others. It cannot depend, as it has been supposed to do, upon the pressure of the nerves between the distended vessels, inasmuch as it sometimes exists, to a severe degree, before the vascular disturbance has commenced. It is more probably owing to some altered condition of the nerve-fibres, which share the disease in common with the other tissues involved. It is proportionate to the natural sensibility of the patient, and of the part affected. It is severe in inflammation of the skin, particularly of the fingers, and very acute when the enveloping serous membranes of the internal organs are affected, being of a more dull heavy character when their parenchyma or lining mucous membrane is attacked.

Pain is the general term used to express the exaggeration or alteration of the sensation of the inflamed parts; and as different parts have their peculiar sensations, so does the character of the pain in inflammation

vary in a similar manner. Inflammation of the eye, more particularly when it affects the retina, is attended with acute sensitiveness and intolerance of light, and with the appearance of flashes, stars, and scintillations of various kinds. And corresponding morbid acuteness, as well as erroneous impressions of sound, smell, and taste, are observed in inflammation of the ear, the olfactory and gustatory organs.

In the well-ordered constitution, the pain is a fair measure of the activity of the inflammation, but in nervous and sensitive patients, and in persons out of health, it is often very disproportionate to the real disease, and is sometimes so acute that we may be induced to resort to treatment of unnecessary and injurious severity, or, on the other hand, may overlook the inflammatory part of the disorder, and imagine the affection to be entirely of a hysterical nature. This frequently happens in young women, whose nervous system is particularly sensitive. In such persons, a slight attack of inflammation of a joint is often attended with excessive pain and tenderness, which are not confined to the part immediately affected, but extend to a considerable distance from it, perhaps all over the limb. These cases of inflamed joints, in which the pain is disproportionate to the other signs of inflammation, are very difficult to cure; the affection lingers on from week to week, and month to month, bidding defiance to one mode of treatment after another. Sometimes the inflammatory condition subsides altogether, and leaves behind merely a state of preternatural sensibility; the joint continues painful and tender, so that slight blows cause severe suffering, felt for a long time; and a little more exertion than usual in the day is followed by a sleepless night, in consequence of the pain. You have seen several cases of this affection of the knee-joint, lately under treatment at the hospital; in all of them pain and tenderness were the prominent symptoms, in some of them the feeling of crepitation in the joint was greater than natural, and in a few there was slight swelling in the evening. In addition to the tonic regimen, or constitutional treatment, which the particular symptoms seemed to require, more benefit was derived from pressure, by means of adhesive plaster, or plaster containing opium, than from any other local application.

Secondly. The pain of inflammation is generally greatest in dense resisting structures—as the fibrous and serous membranes, bones, the testicle, and the eye-ball.

Thirdly. Pain is proportionate to the activity of the inflammation. You will sometimes be surprised at the slight amount of suffering caused by extensive and destructive inflammatory affections, of a languid character, in scrofulous persons. The pain varies also with the stage of the inflammation, being dull, heavy, or throbbing, when suppuration begins, and very severe when the inflammation is passing into ulceration and mortification. This is more particularly the case in phagedenic ulceration, and when mortification supervenes quickly on the occurrence of inflammation, as in traumatic gangrene, and some other cases to be described in treating of mortification.

I have said that the pain of inflammation depends

upon a deranged condition of the nerves rather than upon the vascular fullness of the part, because the pain often occurs before the other symptoms have set in. Nevertheless, there can be no doubt that it is materially increased by the pressure of the tender nerves between the distended vessels, as well as by the general stretching of the part, the resistance of some tissues and the yielding of others; and it may occasionally be diminished very much by the expulsion of the blood from the inflamed part, and the support afforded by well regulated pressure. In this way great and sudden relief may sometimes be obtained from the severe pain of acute inflammation. Patients have been able to walk about immediately after the application of pressure to an inflamed testicle, the pain of which had before been almost intolerable, and the disease has thus been cured. To effect this the pressure must be steady, uniform and continued, so as to support the distended vessels and the stretched tissues, without exerting violence at any particular part; and unless the pain be relieved in a short time, the pressure should be removed, for the continuance of the pain is a sure sign that the treatment is doing no good, and it may be productive of much mischief.

Although pain thus occasionally admits of much relief from uniform external pressure, it is greatly aggravated by collections of pus within the part, causing stretching of the inflamed and resisting textures which surround the abscess. Many of you have probably experienced the immediate relief afforded by the opening of a small subcutaneous abscess or boil, over which the skin was inflamed and tense, and you may conceive how dreadful must be the agony of acute suppuration going on in the interior of the eye-ball.

The increased heat of the inflamed part, though not so great as the altered sensations of the patient would imply, is, nevertheless, appreciable by the thermometer. The average heat of the body ranges from about 98° to 100° , but in fever it has been known to rise to 107° ; and Hunter's well-known experiment is sufficient illustration of the rise of temperature in the inflamed part. Having tapped a hydrocele, and introduced a thermometer through the trocar, he found the heat to be 92° ; on a repetition of the experiment next day, when the inflammation had set in, the thermometer rose to $98\frac{1}{4}^{\circ}$, shewing an increase of $6\frac{3}{4}^{\circ}$. This increase of temperature in the inflamed part, is due to the preternatural rapidity of those changes in the blood and textures upon which the natural heat of the body depends;—to the greater afflux of arterial blood, the quick formation of fibrin, &c., during which, oxygen is combined and heat generated. A sort of combustion is going on, of the same kind as that which usually takes place in the body, but with increased rapidity. The heat of an inflamed part within reach of the thermometer is not very likely to exceed that of the blood in the centre of the body, but it is possible that this may occur when an internal organ is the seat of acute inflammation.

The redness attendant on inflammation depends, as I have already explained, upon the dilated vessels admitting a greater number of red corpuscles, which find their way into capillary tubes in sufficient numbers

to become visible. The shade of colour is bright when the inflammation is active, dull or bluish when it is sluggish and chronic. The swelling results in part from the distended condition of the vessels, but chiefly from the effusion of the constituents of the blood into the surrounding tissues; it is, therefore, greatest in parts where looseness of texture offers least resistance to the passage of these fluids into them—as the scrotum, the neighbourhood of the eyes, and the face. It is at first soft, being occasioned by the presence of serum, which extends to a considerable distance from the inflamed part; then it becomes firm in the middle, in consequence of the effusion and coagulation of fibrin or lymph; and, thirdly, the existence of a soft central swelling, with an indurated circumference, is a tolerably sure sign of the presence of pus.

I must not omit to mention another important symptom and effect of inflammation, which is nearly allied to the alteration or suspension of nutrition,—I mean, the alteration or suspension of function. The inflamed brain either acts in a disorderly manner, giving rise to erroneous ideas and convulsive movements, or it ceases to convey impressions to the mind, and to exercise volitional sway over the muscular system; and an inflamed muscle refuses obedience to voluntary impulses—it cannot act. The alteration and suspension of secretion is still more obvious, and constitutes one of the symptoms on which the physician most relies, in forming his diagnosis of the inflammation of an internal organ.

I have described to you the symptoms of inflammation, as they commonly occur, illustrating them by the instance of inflammation of the finger, which may be taken as a fair specimen of the disorder in its complete or fully developed condition, where its chief symptoms are presented to our observation, but I should greatly mislead you if I were to induce you to imagine that this protean disorder always presents the same symptoms, or follows the same course. Any, or indeed all, of the above-mentioned symptoms, may be absent, and we are sometimes cognizant of the existence of the process only by witnessing its effects; still, more frequently, the inflammation is seated in a spot concealed from our view, so that we can gain no information respecting the redness, the heat, and the swelling, and have to take as our guide the pain, the least uncertain of all the symptoms, because it is the least likely to be proportionate to the severity of the disease, and because it is communicated to us through the medium of the patient.

In its effects also, inflammation is no less variable than in its symptoms; in one case effusion, in another, ulceration, takes the lead, and in a third the invasion of the disease is quickly followed by mortification, without our being able to offer an explanation of the particular result in either case. I cannot present a more striking illustration of the numerous forms in which inflammation may occur in a single tissue, than by directing your attention to the diseases of the skin. A chilblain, carbuncle, erysipelas, and lepra, are all inflammatory affections, yet how greatly do they differ from one another, and how little do we know of the causes upon which these differences depend. Equally

unintelligible, in the present state of our knowledge, are those peculiar changes in the blood, dependent (as we suppose,) upon the influence of subtle poisons, which attach to inflammation the distinctive characters of scarlatina, measles, small-pox, and syphilis.

THE

CONTAGION OF ASIATIC CHOLERA.*

By E. O. SPOONER, Esq., Blandford.

If we examine the official reports of the cholera in Great Britain for the *first nine weeks*, from September 28th to December 1st, we shall find the number of cases 1,590, of which 741 have died. Of these cases the metropolis gives 413, and the deaths 225. The whole number of cases reported at this period of more than two months, after the first invasion, in the remainder of England and Wales, is only 148, and the deaths 77. The proportion is more than 3 to 1; yet, when we further take into consideration that the metropolis contains two millions and a quarter of inhabitants, while fifteen millions inhabit the cities and villages of England and Wales, (a large number living in towns far worse than the metropolitan district in point of sanitary arrangements,) we must be still more struck with the disproportionate mortality nine weeks after we had been told the epidemic influence had reached the shores of England!

In Scotland, or rather in about seven localities there, are reported in the same time 1,011 cases and 439 deaths, yet, all Scotland does not number three millions. Here again we have 3 to 1 against Scotland. If we take into account the number of pest vessels which have entered the mouth of the Thames and the Firth of Forth from the infected ports on the continent, *we shall be able to explain this anomaly.*

Each focus of contagion has its own radius. The intercourse of the Firth of Forth soon reaches Glasgow and Dumfries. The first nine weeks of cholera in England, however, clearly show that for the most part, those places only had been then visited which have *primarily* had a large tonnage of *northern shipping.*

The *secondary spread* of cholera by inland communication with our own affected ports has not yet penetrated very far into the interior of the country. A tramp arrives at Hertford or Reading, and originates a few cases; or a family with the disease about them, migrate from London to Offchurch, in the neighbourhood of Leamington, and, with indecent haste, Leamington is reported by the Board of Health to be cholera smitten.

Indignant contradictions to these misstatements are common enough, and it is scarcely worth while to say that Portland, some eight weeks ago, was reported in the cholera list.

* Continued from page 37.

The not uncommon occurrence of the death of a child of three years old, after a few hours illness, induced the Board to make this evidently erroneous statement. They must at that time have been extremely anxious for country cholera cases to put this down as one of Asiatic cholera. They have not been able to report a case there since. It has been evidently the object of the Board, in order to prop up their theory of the local origin of cholera from defective sanitary arrangements, to make it appear that here, there, and everywhere in England it was going to shew itself. The laws of its contagion refuse to bend themselves to their sanitary theories, and country cholera cases in England, after three months importations, have hitherto been rare. The next three months, however, will reverse the picture.

I have already observed that the non-contagion of cholera, though it has been puffed off *pro bono publico* in the companion to the "British Almanack," as a "most blessed" discovery of the sanitary commission, was the general belief of the Indian surgeons previous to 1824. In 1824, Dr. Krabinski, an Armenian physician, residing at Tiflis, in a letter addressed to the Archbishop of the Armenian Church, propounds the same dogma. "This disease is not contagious, like the plague and other diseases." He had seen much of the disease, both in India and Persia, but in the warmer climates of the east so rapid is the diffusion of contagion, that the spokes of its chariot wheels are not visible. Dr. Reumann, however, in the same year, published for the Russian Government two volumes of valuable reports on the "Progress of Cholera from 1817 to 1823, when it appeared at Astrachan." He was one of the most distinguished of Russian physicians, and with the electric scrutiny of a logical mind, he detected what was invisible to Krabinski. He says,—“We deem it, nevertheless, to be contagious, and there is no doubt but that it was brought by the merchandize and people in the boats to Astrachan, yet it is not so infectious as the plague.” Questions of this controverted character are not to be settled on the mere dicta of authorities, and though the Sanitary Commission, and the Board of Health, have adopted the Krabinski dogma, we must be permitted to enquire into the new advices received at the foreign office upon which their conclusions are grounded.

Let us examine the most recent, published in the Appendix to the second report of the Sanitary Commission. Here we find diametrically conflicting testimony; one of the deponents is, however, merely a British Vice-Consul; the other, an experienced British physician. Mr. Vice-Consul Bassam, of Mossul, in a despatch dated January, 1848, says,—“From what I have seen of this disease it does not appear to be in the least degree contagious, and scarcely, if at all, infectious, unless, perhaps, where many sick are congregated together, as in the wards of a hospital; in

fact, I should consider it as an almost true epidemic, such as the influenza which has prevailed here since the last cholera disappeared.” Quite a Coryphæus in the favourite doctrines of Gwydyr House is this Mr. Vice-Consul Bassam, the eminent professional authority at Mossul! Alas! medical men very seldom obtain the Consular or Vice-Consular dignity. Her Majesty's Consul at Archangel is more modest, and requested Dr. Mackenzie, Staff Surgeon, to answer the question. He says, very distinctly and pointedly, —“The majority of facts collected during the present visitation of the cholera confirm the opinion that the disease spreads from person to person, through the medium of the air, and there is every probability that the principle of infection finds its way into the system through these different media,—viz., the respiratory organs, the digestive organs, and the skin” Such is some of the evidence of “the gradual abandonment of the opinion that the propagation of epidemic disease is mainly dependent on a specific contagion emanating from the bodies of the sick!” Thus, we see then, the most recent advices do not bear out the conclusion announced with so much emphasis by the Sanitary Commission, yet their epitomist, in the “Companion to the Almanack,” (I suppose one of themselves,) bursts into the rhapsody,—“Blessed discovery!” “It is impossible to over-rate the importance of this discovery.” He adds, in the same *Io pæan* style,—“The non-contagious character of cholera is now then considered sufficiently established, and how many blessings follow in the rear of that one great blessing.” We cannot, for the life of us, understand the consolation which the public can receive from knowing that they may at any moment, in any part of England, breathe this “poisonous gas emitted under certain conditions of heat and moisture, from decaying animal and vegetable matter, unduly exposed to its influence;” that they may meet with it “going up one side of a street,” or “waiting for the opening of a door before it enters the house!” This seems very sorry comfort indeed, though it may be deemed a most wonderful discovery! One would imagine from Dr. Parkes, that the safest place was the bedside of the sick, rubbing their cramped limbs, or emptying their close stools, for “not one of these hospital attendants,” says he, “were attacked.” “The medical officers were constantly on duty, yet enjoyed the same immunity.”

They were unsusceptible enough to escape such a subtle enemy as the epidemic atmospheric influence, and yet we are told their escape proves the disease non-contagious! As reasonably might we conclude that the well-seasoned nurses of our scarlet-fever and small-pox patients, who do not catch the disorder, prove these diseases to be non-contagious. *The mild and benign form of cholera is a simple diarrhœa, which may be quite as effectual as the modified form of small-pox, induced by inoculation or vaccination. A*

slight redness in the throat, and a scarcely-noticed rash on the skin, will for ever render a person unsusceptible of the most malignant exhalations of scarlet-fever. Secondary attacks occasionally occur; but the majority of mankind, if they have passed through the milder forms of either of these contagious diseases, are thenceforward *contagion-proof*.

The law is less universal with cholera, but it will be found sufficiently general to solve the enigma of the *occasional immunity* of nurses and *medical men* when in the closest attendance upon the sick. But that this immunity is only *occasional*, dependent on natural insusceptibility or previous seasoning, has been proved by our best authorities.

Drs. Russel and Barry, in their able report on the cholera of Russia in 1831, make the following statement respecting St. Petersburg:—"The number of medical men and hospital attendants attacked with cholera during the present epidemic in proportion to the whole employed, has been beyond all comparison greater than in India, under similar circumstances. Twenty-five medical men have been already seized, and nine have died out of two hundred and sixty." Notwithstanding the early attention to the first symptoms which medical men and hospital nurses receive, *many deaths have already been recorded in England and Scotland during the present epidemic. The number of mild attacks, of course, are unknown; they are considered simple cases of diarrhoea; but they are, in fact, mild attacks of cholera.*

We are glad to find the eyes of the medical profession in Scotland and in Ireland are beginning to open to some of the fallacies of the Board of Health and the Sanitary Commission, and we are gratified to know that a man of Dr. Simpson's acuteness has personally investigated the origin of cholera at Newhaven, though his coachman narrowly escaped the formidable effects of the contagion. It is true four of the nurses of the Edinburgh Cholera Hospital were within twenty-four hours (according to Dr. Sutherland,) poisoned by the emanations of the crowded wards. Three of the four died of Asiatic cholera; but Dr. Sutherland says very coolly "we don't call this contagion!" "I warned them of their danger from the bad smell I detected," and the Sanitary Commissioners have testified to the "general immunity of nurses and other attendants on the affected!!"

One of the most recent and graphic descriptions of cholera has been afforded by Mr. Thom, in his Report of the causes, character, and treatment, of the spasmodic cholera in H.M. 86th Regiment, at Kurrachee. Among the arguments brought forward by this gentleman, occurs the following passage:—"It was equally apparent that there was nothing contagious in the nature of the disease, *for instead of a few cases appearing first, and the disease gradually spreading*, it suddenly burst forth in a few hours in every European regiment,

whether in camp or barracks,—in every tent, and in every house; and it was at its acme in forty-eight hours after, when, instead of spreading further, it gradually declined. Now, it appears that for some days or even weeks, A FEW CASES HAD APPEARED IN THE NATIVE TOWN OF KURRACHEE, but there, about the same period, the malady became suddenly general over the whole place." Now, it appears the few cases appearing for some weeks within the town, were evidently the first *germs of the disease*, which atmospheric causes rapidly ripened and diffused, and entirely do away with the inference drawn from *apparent suddenness* of the general attack. But taking for granted the fact related, that a "few hours were sufficient to spread the disease in all the regiments," we would point out as a complete contradiction to Mr. Thom's deductions respecting the non-contagion of cholera, the circumstances observed in England;—the "few cases occurring first," and "then the disease gradually spreading," is the *universal law of the disease as it has hitherto shewn itself in this country*. The slow progress of the first few weeks of cholera, and the gradual diffusion of the disease at the present time, constitute the very circumstances which Mr. Thom points out as conclusive evidence of contagion. If the argument be a good one as employed by Mr. Thom negatively, it must surely be better still when we find the direct reverse of the picture positively occurring in this country. But the facts are still further explained by Mr. Thom himself. "Long before its visit to Kurrachee," says Mr. Thom, "we heard of its appearance in the Madras Presidency, and subsequently at Poonah, Bombay, and Ahmedabad, Deesa, and finally arriving by the coastward to Scinde, where it first broke out at the sea coast, and from thence gradually extended to Hyderabad and Schwaun."

Now, its gradual advance in the lines of commerce, and its first invasion of the sea-coast of Scinde, are both opposed to the suddenness of the outbreak. The fact is, for a fortnight previous to the arrival of our regiments, the cholera had existed in Kurrachee, in a mild and insidious form. The stagnant atmosphere was loaded with the poison of the pestilence, and no wonder in an Indian climate and in crowded cantonments, the troops were soon rapidly affected. But another remarkable fact which Mr. Thom relates as a proof of its non-contagion, was the comparative escape of the officers. In addition to their being *well fed with animal food*, and better nourished than the men, they were quartered in "houses detached and isolated," and "permitting a free current of air." Can any evidence be more decisive in favour of isolation? If the cause were *wholly* atmospheric, why were not the officers seized as well as the men? They were actually between the two fires,—"*between the 60th regiment and the Sepoys*," both of which suffered severely. Their better nourishment, the isolation, and the

ventilation were the concurrent causes of exemption. The first rendered them less susceptible of contagion, the last two put them out of the reach of infection in such a concentrated form as to produce the disease.

We have read loose statements with regard to the immunity of medical men in India. Putting out of the question the attacks of *diarrhæa*, which we should call *mild cholera*, which were no doubt promptly treated and arrested in the cases of the medical men, we find four out of forty engaged in Scinde, were carried off by the disease. Four out of forty or ten in a hundred is a larger proportion than the number of fatal cases, either in the Sepoy or European regiments. Thus, not only is the fact of the "greater numerical proportion" falling sick with *diarrhæa*, attested by Mr. Thom, but his own statistics clearly prove that the medical officers suffered a greater proportion of mortality than the other officers, and even as great as that of the sepoys, notwithstanding their prompt attention to the first symptoms. This new evidence, then, when carefully sifted, corroborates the statements of Drs. Barry and Russell, whose personal experience, though not so recent, was far more extended. They had witnessed the disease first in the climate of India, where the heat and moisture of the atmosphere combined to render the contagion of cholera most rapidly diffusible and miasmatic, but they added to that experience the most extended observations on the same disease as it appeared in a Russian climate. At St. Petersburg, in 1831, they state, "The number of medical men and hospital attendants attacked with cholera during the present epidemic in proportion to the whole employed, has been beyond all comparison greater than in India under similar circumstances; twenty-five medical men have been already seized, and nine have died, out of two hundred and sixty." The subsequent history of the epidemic in St. Petersburg increased these proportions; while in Paris, where the non-contagious doctrines had taken deep root, the mortality of the medical men was still higher, and even the Prime Minister himself, Casimir Perrier, fell a victim to an insane perambulation of the cholera hospitals, which he took with other officers of State, to assure the public mind that the disease was not contagious. Buonaparte, at Jaffa, was more fortunate, when for similar reasons he breathed for a few minutes a well-ventilated plague-ward of his military hospital.

Anticipating the future spread of the Asiatic cholera throughout the land, when the warm sun of the spring and summer shall ripen the latent germs of this contagion into its acme of malignancy, I cannot but view with some degree of anxiety those non-contagious doctrines which emanate from men in high authority, whose position enables them to influence the opinions of the public as well as a large portion of the profession. Though many books and reports have been written within the last three years on the subject of

cholera, very little has been added to our previous knowledge. Cases of collapse are as uncertain in their result as they were in 1832. The importance of attending to the early symptoms was as clearly taught in that day as it is now; the propriety of ventilation and cleanliness was as universally acknowledged as it is at present. The immediate removal of those attacked with *choleric diarrhæa* into a clean and airy apartment, ought to have formed one of the special directions of our Board of Health. We think that such a plan at Tooting would have mitigated the calamity, but the non-contagious doctrines had unfortunately perverted the mind of the medical attendant, and though he has since changed his views on the subject, a fatal experience has been necessary to remove those errors which men of high position and standing had too carefully propagated.

Since the Asiatic cholera emerged from the confines of Jessore, in 1817, it has not ceased to make its appearance in some quarter or other down to the present time. Thirty-two years of its history have enabled us to track its steps from the extremities of Asia, through the continent of Europe, along the shores of Africa, and even in the New World. From the banks of the Ganges it passed into Burmah and China to the East, while towards the West with equal steps it reached Persia, the shores of the Caspian, the Russian empire, and the various countries of Europe, appearing in America, on its first and last invasion, soon after it had reached the Atlantic ports of Europe. No other disease, besides the small-pox, ever took so wide a range, or continued to exist for so long a period. It possesses the same analogies, in time and space, and unless human ingenuity discover some prophylactic, it bids fair to rival its predecessor in fatality also. It has ever travelled with the measured steps of the human traveller; not with the monsoon, but sometimes against its current;—not with the hurricane, nor with the earthquake. It has not taken any track of volcanic action nor electric movement; it passes toward all points of the compass, irrespective of magnetic or diamagnetic lines of force. In Russia it travelled at the rate of between two and three hundred miles a month, (from 400 to 500 kilometres.) It crosses the Atlantic, taking the line and the mode of conveyance of emigrant ships. It was well observed by the *Quarterly Reviewer* in 1831, that it had "a marvellous penchant for easy travelling." It delights, too, in social intercourse; and in India accompanies marching armies or their camp-followers; and is very fond of grand festivals, whether at Juggernaut or Mecca. But though India had its Juggernaut festivals for ages previous, cholera never broke out among its congregated masses till after the *leaven* of 1817. Our armies had often crossed the peninsula of India, but never had they been decimated by the cholera till the forces of the Marquis of Hastings were very nearly put *hors de*

combat, by marching into the focus of its contagion, in 1818; and though since the death of Mahomet pilgrimages to Mecca have been annually made by multitudes of the Moslem population, cholera never appeared among its caravans till subsequent to its appearance in Persia, in 1819. Can we draw any other conclusion from premises so well defined and universally acknowledged, than that a disease thus portable must be also communicable?

It is universally attributed to *human intercourse*, from the boats of Astrachan, to the tramp lately confined in Hertford gaol, after whose introduction it broke out in three days among the prisoners. Belfast and Offchurch, Leith and Staten Island, tell the same story. It is nowhere bred and multiplied till it has been *first imported*. The tell-tale newspapers constantly reiterate this statement; can anything but a *contagious principle* account for such uniform testimony? Can any disease be portable and reproductive without being contagious? Do we ever hear of the agues produced by the fens of Lincolnshire travelling over the Cotswold Hills? Malarious influence is confined to the localities which generate it; *it is the property of contagion alone to defy all climates*, and such has been the case with the Asiatic cholera, wherever its poisonous *leaven* has been imported. Cesspools and stagnant ditches,—the bogs of Ireland,—the back slums and sewer mouths of London, and Glasgow, and Edinburgh, were all as numerous and uncleansed in 1847 as in 1848, and soup-fed pauper children were crowded in masses then as now, but no pestilential cholera was generated under all the conditions of vegetable and animal putrefaction, in that, or in ten preceding years. The efficient cause was absent; the *contagion* was not imported till the autumn of 1848.

That diseases exist which are *both epidemic and contagious*, cannot be a matter of dispute among scientific men who understand the meaning attached to those terms. If an epidemic disease be defined, as some writers have done, as a disease not capable of being propagated by contagion, and if Asiatic cholera be considered as such an epidemic, it is at once begging the question. We deny *in limine*, the major proposition. The definition is erroneous. Small-pox is *often an epidemic*, and yet is invariably propagated by contagion. Cholera we allow to be an epidemic disease, and its whole history from 1817 to 1849, demonstrates that it is a pestilence which is propagated by contagion, or in other words, that the *emanations from the sick are capable of communicating the same disease to the healthy individual*! Now, small-pox has never been absent from the earth since the time of Mahomet, when it first appears to have commenced its destructive career. Since that early period it has always been found, and though it was once fondly anticipated by those who founded the practice of vaccination, that like the dodo, it would by and by become extinct; the

history of its progress and continuance have hitherto falsified the anticipations of the enthusiastic philanthropist. The “sweating sickness,” and “the black death,” which committed such ravages during the middle ages, have entirely disappeared. They *may have been epidemics* without the contagious property,—without the power of reproducing and perpetuating their kind, and when the conditions of their production ceased they may have died a natural death. It is impossible for us now to settle the question of their contagion upon any satisfactory basis. The facts are wanting on which to build a perfectly satisfactory conclusion. It would have been fortunate for mankind if the cholera had left us equally in the dark.

The epidemic invasion of the Asiatic cholera in 1831, was first reported officially in the first week of December in that year. The last week in March, 1832, (March 29th,) presented the following statistics of the disease:—

Total number of cases	8815
Total number of deaths	3320

This table exhibits the extent to which the disease had extended on its first (generally the most severe,) visitation during the period of four months. The view taken by the Board of Health of that period, as well as by the majority of medical men in England, was, that the disease is contagious. The garments and bed-clothing of the sick were strictly purified if not destroyed, and the communication between the sick and the healthy was as much as possible suspended. No such recommendations have been issued by the present Board of Health, and the community have been taught to believe the whole system of quarantine public and private, national and domestic, quite useless and impracticable.

What has been the result of the new system adopted by the Board of Health now in existence?

The Asiatic cholera began its ravages in the first week of October, 1848. Up to January 27, 1849, *rather less than the same period*, the following results have been registered:—

Total number of cases	10,047
Total number of deaths	4,467

It appears thus pretty clearly, that our present Board of Health have been quite unsuccessful in their plans so far as the arrest or the mitigation of the disease goes. We shall by and by enquire into the sources of their failure. We have had, instead of a diminution of the disease, an actual increase of one fourth during the first four months.

(To be continued.)

ON CERTAIN MORBID CONDITIONS OF THE EPIGASTRIC REGION.

By T. L. WALFORD, Esq., Reading.

(Read at the Reading Pathological Society.)

MR. PRESIDENT AND GENTLEMEN,—

The observations I am about to make relate especially to such an amount and continuance of disorder, as frequently does not prevent the individual from going on with his ordinary duties, yet, existing, constitutes the groundwork of liability to many ordinary ailments, often being the cause why these ordinary ailments do not run through their stages in a short time, or it may be the occasion of their more frequent recurrence than might reasonably be expected.

My object is to point out the precise mode of examination adopted by Dr. Wilson Philip, when examining the liver, to explain the kind of treatment pursued by him, and to call attention to a consequence of protracted indigestion, which forms the basis of that physician's last work, conceiving that his mode of examination is known only to a few, that the kind of treatment he pursues is believed to consist in the administration of ridiculously small doses of mercury, and that no distinct idea exists of the way in which it is believed by Dr. Philip, that consumption does follow as a consequence of protracted indigestion. I regret much that I have not been able to search the works of Dr. Philip, and to extract those parts which he considers proves the effect upon the nervous system from disease in any one organ, and the effect of this induced state of the nervous system, either upon the organ which caused the derangement, or upon some other, whereby the constitutional tendency of that organ would be developed.

It may be stated, as a general proposition, that health is the result of the health of each part combined, consequently when any part has lost its health, the combination is imperfect, and disease is manifested; sooner or later certain other parts become involved. Now, the mode by which the healthy action of one organ is taken cognizance of by all the rest, and the healthy action of all the rest is taken cognizance of by the one, so as to constitute this health, is a subject the consideration of which is deeply interesting; and in proportion as we understand this mode, do we understand the mode in which, when one part becomes diseased, the whole are in consequence at once affected, while certain organs become, after a longer or shorter interval, idiopathically involved; and it is because other parts suffer from disease in any one organ, or parts of an organ, that the selection I have made receives so much importance. The constitutional origin of local diseases has this observation for its basis. It may be further remarked, however, that setting aside those diseases of some organs, which in their effects upon others, disturb their functions mechanically, there are instances of more direct sympathy between one organ and certain others, than between all the rest, this relationship being made sometimes to depend upon age, sex, temperament, &c.

For an ordinary example, take the occurrence of inflammation of the testicles, in an individual suffering from the mumps. Many such instances might be mentioned, and, doubtless, some at once occur to each of you.

By the expression, certain morbid conditions of the epigastric region, I would be understood to mean, the condition of three parts—the pyloric end of the stomach, the liver, (as represented by its left lobe,) and the first bowel. I shall not contend, that the whole of the duodenum is in this region, but that is unimportant. Now, when these parts are not in a normal condition, a state of parts exists, which it is of the greatest importance to recognize and to relieve, even though our assistance may have been sought for a super-added affection. Imagine, for example, that assistance sought for an attack of piles, and, considering piles to be associated with a costive state of the bowels, and both dependent upon inaction of the liver, the importance of looking to the condition of the epigastric region will at once be manifest, especially as the more effectual means of quickly relieving the patient can only be applied after such an examination. Indeed, the preventing of a recurrence of the attack, entirely depends upon such recognition, and this is as much the duty of the medical man, as the obtaining for his patient immediate relief.

In examining, then, the epigastric region, I would describe a state of parts, sometimes discoverable on a physical examination, premising that sometimes only one organ, more frequently two, and at other times all three may be deranged together. I will notice them in the order in which I just mentioned them. *First*, then, the pyloric end of the stomach may have become thickened, and in such a state as to cause great tenderness on pressure. Of course, by the physical examination, I only propose to recognize the tenderness, and thence infer, more or less of thickening. But to find out this tenderness, (bearing in mind it has been slowly called into existence,) it will be desirable to let the patient stand, where the circumstances allow that posture, the part being only thinly covered, and, ascertaining a space, commencing about an inch below the ensiform cartilage, place two or three fingers, at nearly right angles, parallel to the margin of the false ribs on the right side, but leaving an interval of half an inch. Now, a sudden pushing them inwards, when this tenderness exists, will give much pain.

Now, it is stated by Dr. Philip, on the authority of the celebrated anatomist, Mr. Brooks, that the space I have marked out is immediately over the pyloric end of the stomach; and considering the depth of that organ from the surface, and that it may be overlapped by the liver, it will be at once apparent how necessary it is to make the examination in the way I have pointed out. General manipulation here would not detect it.

Secondly. The liver may have become distended; the extent of the distension may be little or much; tenderness also may be combined with it. These conditions are to be discovered in the same way as tenderness of the pyloric end of the stomach. When, however, much of distension and tenderness of the

liver exist, an amount of uncertainty will be thrown over the examination, as far as the stomach is concerned, but, inasmuch as the treatment will be the same, it is a doubt of no moment.

It is, however, to be remarked in this place, that the ordinary modes of manipulation and percussion may be employed for an examination of the liver, in addition, or by themselves; and it should also be stated, on the authority of Dr. Philip, (others could be added,) that it is considered, that when the liver is in a healthy state, free from distension, it does not descend below the ribs, so that the extent to which it has descended may be taken as the measure of its distension. In proof of the correctness of this statement, when not distended, both sides of the epigastric region give the same indications upon examination, made as I have described, as may be seen when examining this region in a perfectly healthy individual. I would also add, as the result of my own experience, that I have seen it distended greatly below the ribs, and under treatment, recede to the normal boundaries.

Thirdly. The duodenum may have become distended, and evince more or less tenderness on pressure. This will also vary; indeed, more frequently the distension, according to my observation, exists without tenderness. The best mode of examining this organ will be in the erect position also, the parts being lightly covered, and the fingers applied at right angles over the organ, and in different parts of its perpendicular course. Where doubt exists as to any distension, examining the corresponding parts on the other side of the mesial line, will at once enable us to decide. Indeed it is very remarkable, the difference which is manifested on examining the duodenum in a state of distension, and the corresponding part of the other side of the body; and when we consider the perpendicular course of the bowel, and how easily any distension of it can be ascertained, we feel inclined to point to it as an illustration of the wisdom and goodness of God, at any rate as affording a means of diagnosis to the medical man, by considering the value of its indications when in a state of distension.

I have thus endeavoured to describe a mode of examination, peculiar in some respects, by which a morbid condition of the epigastric region may be ascertained. To this audience I need not remark, how essential to health is a normal condition of one and all these parts, and I would now take a cursory glance at some of the more obvious exciting causes of an unhealthy condition of this region. If, with reference to the lungs, our care cannot augment the quantity of air inspired, so as to produce disease, but is, or ought to be so employed, that what they themselves excrete, should be, by ventilation, removed at once from within our reach; not so with regard to the stomach. With this organ, the bulk of mankind but slowly learn, even from dear-bought experience, the danger they are liable to whilst supplying the wants of the system. To say nothing of the pernicious practices of the glutton and the wine-bibber, much ignorance and thoughtlessness prevails upon the subject. The knowledge of the art of cookery, for its legitimate ends, needs to be more widely diffused, whilst

numbers in the lower ranks of life not only need this knowledge, but the means to procure more suitable articles for sustenance themselves.

It would appear that the power we have over what should enter the stomach is unlimited, and therefore requires to be rigidly controlled. So that until the knowledge, by means of which we are to regulate the quantity and quality of our food, together with the frequency of our meals, coupled with a disposition to seek enjoyment in the right using of this knowledge, be the portion of each individual, we shall be continually erring, and frequently the sufferers from disorder which might have been prevented. Hence, then, as the chief exciting causes of disease of the organs in the epigastric region, I must mention errors in diet, as to quantity, quality, and frequency, and the abuse of fermented liquors. You easily see how a disturbed stomach influences the function of the liver, retards the flow of bile, and consequently, the passage of the food become chyme through the first bowel. Let this common error be supposed to have been commenced at the period of weaning, and only occasionally repeated through childhood, imagine it then more frequently repeated after puberty, and still more frequently after manhood, and we shall be at no loss to understand how thickening of the lower end of the stomach, with tenderness on pressure, a distended liver, and an enlarged duodenum have been produced.

The second exciting cause of disorder in one or more of these parts which I would mention, is to be found in the character of our climate. Temperate it is, it is true; but, upon the whole, offering us rather too much of a good thing; for, though "variety is charming," it really is so only as an additional exemplification of wisdom and power. The power of adaptation which there is in the human organism not only exceeds that degree of it which is possessed by the higher classes of organized beings, but exceeds probably what we have ever considered it to be under favourable circumstances. But, great as it is, it seems incapable of bearing us harmless through the frequent, sudden, and great changes of temperature which occur in this country. The effect of change of temperature upon the liver, (for I am inclined to think that it is this organ which is directly influenced by temperature, the stomach, probably, indirectly, from the effects of low temperature upon the skin,) may be illustrated by considering the disease which characterizes our hot weather,—viz., English cholera. In this disease every symptom is an effect, directly or indirectly, of the state of the liver, and just in proportion as the means employed are remedies for the disordered liver, do the symptoms disappear. Taking, then, English cholera as an illustration of the effect of change of temperature, accompanied, probably, with as great changes in the electric condition of the atmosphere, upon the function of the liver, I ask for a less effect from a less degree of temperature. Now, when an influence like temperature, a certain degree of which is essential to life, accompanied by as great changes in the electrical condition, varies so much as to be present at one time in such a degree as to exert only its essentially needed influence as one

of the stimuli of life, and at another time, in such a degree as to produce a distressing malady, can we not see in the varying temperature of our climate, the prolific source of deranged function of the liver and its consequences.

The last cause of disease which I shall mention belongs to the class of predisposing, and is to be found in some anormal peculiarity of structure of probably the whole organism; but on this I shall not dwell, except to remark that it is considered by a high authority, that one of the most frequently hereditary morbid conditions, is a distended liver.

Having described the physical examination by which disorder of one or more parts in the epigastric region may be recognized, and alluded to the exciting causes in a general manner, I would say a word or two on the order in which disease is manifested. In the case of hereditary distension of the liver, the first step originates with functional derangement of that organ, involving secondarily the duodenum, and, perhaps, lastly, the stomach, to some extent. In most cases, however, the stomach is the first organ to suffer, then the liver, and lastly, the duodenum. I have before remarked how easy it is to believe the fact of an offended stomach affecting at once the function of the liver, even if it be difficult to understand the mode, as expressed by the term sympathy; still, if we look upon the stomach as having received into its cavity that which it is wholly unable to assimilate, and witness the violent retching which may be necessary to remove it, and, reflecting on the explanation given by this action,—viz., a high degree of irritation of the stomach, which is conveyed by sympathy to the abdominal muscles, inducing in them violent contraction, and so retching, we can get some idea of the meaning intended to be conveyed by the use of that term. Now, a degree of irritation of the vessels of the stomach, which produces vomiting, produces also a perturbed state of the function of the liver, and a less degree of irritation, will affect the liver in a similar manner, but in a less degree, though vomiting be not excited. It is a succession of these actions, which at last ends in a thickened condition of the tissues of the stomach, accompanied or not by tenderness on pressure, according as it has been rapidly or slowly produced. In common terms, we have now established a condition of the stomach, which is below par, a necessary consequence of which is a less amount of healthy stimulus for the liver, which, be it remembered, has, in every step of the stomach affection, been at one time too much, at another, too little, excited, so that we have established at the same time the state of distended liver. Perhaps it is not right wholly to exempt the duodenum from being concerned with the stomach, to a slight extent, in causing the derangement of the liver, but, practically, I think there will be no harm in the plan I have adopted, remarking, that when the duodenum becomes the cause of disturbance in the functions of the liver and stomach, it does so because it has not been aided by the liver to the healthy extent, so that it might pass on its contents, for a substance which has passed the pylorus has done what mischief it had

power to do, ere it reaches the duodenum. The distension of the duodenum then follows the diminished function of the liver, and in this way:—The natural stimulus to the duodenum to pass on its contents is chyme and bile, but in the state in which the liver is, the flow of bile is ineffectually solicited; for whilst chyme and bile excite the duodenum, chyme alone excites the common bile duct, but now in vain. As useless is it towards eliciting a healthy discharge of bile, as would be horseradish to excite saliva in the mouth of a patient suffering under fever.

Having thus noticed the order in which these parts become deranged, I would observe that in practice we are to look only for degrees of this affection.

It may be proper now just to mention a few of the symptoms which will characterize an individual in whom these processes may be going on. Take, then, unequal and slow growth as an effect of the *hereditary* abnormal condition of the parts in the epigastric region to a certain extent, as deranged in common with the whole; and as evidence that the parts in this region are disordered, there being no hereditary taint, look at convulsions in a child, not arising from any idiopathic affection of the nervous system, nor from teething, but from some indigestible article taken as food. Has this indigestible substance made frequent attempts to pass the pylorus, but in vain? and is this resistance which has been opposed to its passing to end there? In what portion of the digestive apparatus would you look for the origin of the disturbance in the nervous system you are witnessing, if not here? This condition, I would again observe, is frequently represented by the sick headache of youth and adult age; and what more distressing liability for any man. For its importance, as a symptom to be remedied, witness the complexion and the paleness of the countenance, with its languid eye; see the wearisomeness of any effort made to discharge a duty which cannot be delayed; mark the disinclination to hear, to speak, to move; see how thoroughly an individual is unmanned by a bilious headache, and judge whether it be a matter of importance to be aware of the precise condition of the deranged parts of that organism, and of the means by which it is to be remedied. For this information I need not say the profession, or rather our country, is indebted to the indefatigable Dr. Wilson Philip, and it is because I fear his opinions are not so extensively known as their importance, in my judgment, requires, that I have presumed to make them the subject of this paper. It is this condition of the stomach, liver, and duodenum, which constitutes a bilious condition; and, I believe, until it be recognized as such, and the patient treated until he be cured, so long will a bilious headache be left to be remedied by the suggestions of empiricism, and be the prey of the charlatan.

There are other constitutional maladies, the course of which is intimately connected with derangement in the epigastric region, as rheumatism, gout, &c. Cases of fever in children, perhaps, preceded by, or at any time accompanied by, relaxed bowels, the evacuations being liquid, pale, offensive, which you attempt to restore to convalescence successfully, only in proportion as you

correct the state of the hepatic function. In the specific diseases of children, the course they will pursue, and the presence of unusually grave symptoms, are often materially dependent on the condition of the digestive organs, as represented by the state of the epigastric region. Again, this condition, more frequently than any other, lies at the foundation of certain states of general disorder, in which case it is often stated that there exists no local condition capable of giving rise to this undefined general ailment, a case which, in the opinion of the writer, is more rare than is generally supposed. On this part of the subject I would remark of this morbid condition, that it is frequently the cause why tonic remedies cannot be borne by the system, and yet the system is loudly calling for an invigorating treatment. Lastly, in my own experience, I have found this condition of the epigastric region more frequently than any disorder of any other organ or organs, the cause of common febrile disturbance as differing from continued fever. It should not be omitted to be mentioned, and I mention it lastly, because of its importance, that, by Dr. Philip, this condition, especially the state of the liver, is regarded as the cause of consumption in the vast majority of cases which occur in this country, and he goes so far as to state, that by recognizing this condition, and remedying it, consumption may be *prevented*.

His view of the mode in which it thus acts, I understand to be as follows:—This morbid condition which I have been attempting to describe, having been in existence a long time, acts as a fret of nerve upon the brain and spinal marrow, debilitating them in their functions, from which organs you are aware, he derives the true nervous power, on the presence of which depends the healthy action of every organ in the system, as Doctor Philip contends, his experiments demonstrate. This state of the nervous system—debility of the brain and spinal marrow—constitutes the second stage in the changes of the system, which is at last to end in embarrassment of the function of the lungs, where the tendency exists, then, to the deposition of tubercles. Now, the effect of this debilitated condition of the nervous system, falls, sometimes on one organ, sometimes on others. In the case of consumption, the lungs suffer, engorgement follows, and that action to which they are most prone, takes place. This is the third stage in the order of events, and is manifested by the ordinary symptoms of tubercular degeneration. Dr. Philip states, that when he has seen a patient in whom the symptoms of mischief in the chest have existed only a fortnight, he has been enabled to arrest the development of tubercles. In confirmation of the correctness of these principles, he states, that he has treated cases in many families, in which hitherto they had been dying-off fast of consumption, and that by acting on these principles the ravages of that malady have been arrested. My own experience, even if in confirmation of them, must necessarily be very limited; I can point to one family where four out of seven had fallen a sacrifice, and can attribute to nothing else than the partial adoption of these principles, the at present healthy condition

of the remaining three. One other case is that of a female ill with continued fever, in whom this morbid state of the organs in the epigastric region existed to a great degree. It was recognized and treated accordingly. She recovered, and has continued in the enjoyment of health ever since. Her family subsequently left the town for Northamptonshire. A few months since the father called on me, telling me that he had been spitting blood, and that his case was considered one of consumption. At the time I was in attendance on the daughter for fever, he was ailing frequently with headache, costive bowels, want of energy, and sallow complexion. But to have prescribed for a man who did not consider himself to be needing any advice would have been an useless attempt. The stage where consumption might have been prevented, was, unconsciously to him and myself too, allowed to pass away unimproved, and an effect followed, which science could have prevented, but cannot cure. He told me also, that he had buried one daughter who had died of consumption, and that another was doomed. Happily, the one which I attended for fever, was in the enjoyment of health. To me, this is valuable evidence in confirmation of the soundness of principles, the object of which is not to cure consumption, but to prevent its coming into existence. And when can we think of a disease which is carrying off its scores of thousands of victims in England alone every year, with any satisfaction, if it be not when considering any reasonable mode by which it can be prevented. I would only add, surely these principles, which embrace such an object, deserve the calm judgment of an enlightened and benovolent profession, but for the grounds on which Dr. Philip bases his doctrines, I must refer you to his works.

This brief and imperfect description of certain morbid derangements of the organs in the epigastric region, you will consider should have with it a glance at the means to be used for its relief. As to the diet which will be proper for a patient under treatment, I need say nothing to this audience. Cases in which the mucous membrane of the stomach and duodenum is in a state of subacute or chronic inflammation, not only require a diet easy to be assimilated, but as little in the way of food as the patient can do with. It should also be duly considered, that as the mucous membrane is the first to become affected, so it must be the first to be remedied in the treatment of these cases; for in proportion as this morbid condition of the stomach is corrected, is the way cleared for a successful result from remedies designed to relieve the liver, and where the exciting causes have been such as to involve not only the stomach but also the duodenum, must the relief of that organ proceed with the relief of the inflamed condition of the pyloric end of the stomach. When there is tenderness on pressure, cupping or leeches on the part specified for examining the organs, and repeated once in four days or a week, according to the severity of the case, will be proper. Calomel is to be given on alternate nights, commencing with a grain, made into a pill with extract of liquorice, and to be followed by

some suitable laxative in the morning. When a grain of calomel with the morning laxative is insufficient to act two or three times on the bowels in the forenoon, a grain and a half may be given, and it may be gradually increased to any quantity, so long as it is carried off by the laxative in the morning, and the gums remain unaffected—an object to be, except in certain cases, scrupulously avoided. With this treatment may be given some nitrate of potash, or Mindererus' spirit, with or without ipecacuanha. In females, sometimes calomel cannot be borne, in which case, blue pill, in doses of from three to five grains can be used. When the tenderness has been removed, the exhibition of a tonic dose of calomel or blue pill is to be given every seven or eight hours. This tonic dose consists of a grain of calomel, or ten grains of blue pill, made into twenty pills, with extract of liquorice and ginger, or with any other medicine which accompanying symptoms may require. With this change in the additional use of means, may be given some stomachic tincture twice in a day. Occasionally, counter-irritation may be required; but in what cases, and for any fuller information which may be wished, I beg to refer to the writings of Dr. Philip.

There are certain cases in which this treatment is found wholly inadmissible, as that peculiar idiosyncrasy of constitution, which at once, from a single dose of any mercurial preparation, is thoroughly salivated. Another case is that of an individual in whom the mucous membrane of the alimentary canal is so irritated by a mercurial preparation, that to persevere would be to make the patient worse instead of better. Again, the disposition to profuse uterine discharge which afflicts many females, often proves a source of much embarrassment to the practitioner. And sometimes the state of the nervous system is such, and the circumstances are altogether so unfavourable for the endurance and perseverance necessary to restore healthy action, and to maintain it for a certain time, in an organ which has been for a long time out of health, that to attempt the cure would only be to encounter disappointment.

REMARKS, HISTORICAL AND PRACTICAL, ON DISEASES OF INFANCY.

By E. COPEMAN, M.D., Norwich.

There are few subjects, perhaps, which have engaged more of the attention of medical practitioners within the last few years, than the diseases of children; nor is there, probably, any branch of medical science which has received greater advancement from the labours of those devoted to its elucidation. For a long time neglected, and therefore very imperfectly understood, the diseases of children were treated, (if treated at all save by mothers and nurses,) without the slightest regard to anything like system or practical discrimination. If a physician deigned to notice them at all, his treatment consisted in the merest empiricism, and it appeared as if it were hardly expected that any good could result in such cases from the interference

of a professor of the medical art. In the early part of the eighteenth century, however, some little progress was made in this department, and in 1715, a work entitled "*De Morbis acutis Infantum*" was published by Dr. Walter Harris, a learned physician in great repute at the Court of William and Mary, and whose writings bespeak him to have possessed a highly religious and exemplary character. He was an intimate friend of the great Sydenham, by whose advice it was, he informs us, that he made public his method of treating infantile disorders. His descriptions of disease are by no means clear, nor does he treat much of symptoms; his principal object is to direct attention to a more successful method of treatment than had hitherto prevailed. Dr. Harris' plan is indeed sufficiently simple, and if as universally applicable as he believed it to be, it would save the physician an immensity of difficulty in diagnosis, and remove almost all doubt about the choice of remedies. He says, "As the constitution of young persons is very humid, I do not hesitate to pronounce that all their diseases are of the same kind, and produced by one and the same cause; and that according as different parts of the body, whether upper or lower, are affected with this or that disease,—according, for instance, as the stomach, intestines, lungs, head and nerves are chiefly affected, different names are allotted to the same disease." Thus, according to his theory, all the diseases of children arise from one and the same cause, this being the natural humidity, or fluids of the body, degenerating into an acid. "*Porro symptomata infantum singula acido, ut parenti legitimo, ortum suum debent.*" From these simple premises, he deduces an equally simple indication of treatment; namely, to neutralize the predominating acidity by testaceous powders in large doses, and to purge them off at intervals. The powders were to be given two or three times a day in some aromatic water, and every two or three days, an aperient of rhubarb alone, or mixed with cream of tartar, to remove the contents of the bowels. Several cases are narrated in which the effect of this treatment was remarkably beneficial in various acute diseases of infancy; and this comprises nearly the whole of what is to be learned from his book upon the subject of infantile diseases. In convulsions, Dr. Harris recommends bleeding, under certain circumstances, but only in the intervals between the fits, and not during the fit. On the subject of bleeding in general, he offers some sage remarks deserving of being quoted. "As regards venesection in children, although a marked transference of the febrile matter into the lungs, and *convulsive coughs*, sometimes require it in the smallest infants; yet it is very manifest that it is not a remedy adapted to their nature, nor better suited to this most tender age than for decrepid old people. I do not therefore think it at all necessary to require its aid in any affection of infancy, except in convulsive coughs, or where a troublesome cough accompanies a fever of sudden origin, &c." Rhubarb he extols as without exception the best purgative for children, and considers aloes injurious; also Cethiop's mineral as the best mercurial "*quia qualicunque quantitate, et quotiescumque exhibita salivationem non solet excitare.*" Dr. Harris thus sums up his remarks upon the treatment of acute diseases of children, and I transcribe his

own words, even at the risk of being considered prodigal of quotations, because the conclusion arrived at from his experience, his desire for improvement in practice, and his dependence on Providence for the success of means judiciously employed, can scarcely be more briefly or more forcibly expressed. "I am fully persuaded, after a long life and much experience, that the more simple methods of cure, unlike the elegant technicalities of certain learned men, are generally more grateful to the stomach, more conducive to the restoration of health, and are more frequently accompanied with the divine blessing, than a pompous farrago of medicines, however much a manifold authority, new or old, may militate against this opinion or contradict the simple truth." The method of prescribing, at the period in which Dr. Harris practised, and before his time, was so contrary to the simple plan he advised, and consisted of such an incongruous mixture of multifarious ingredients, that it was not likely he should live to see old prejudices surmounted, and his plan generally followed; indeed, for many years after his death, the art of prescribing remained complicated and indefinite, and it was left for the present generation to separate the good from the bad,—to choose the former and reject the latter,—to profit by the advanced state of botanical and chemical knowledge,—and thereby to contribute materially to the alleviation of the various ills of mortality.

(To be continued.)

CASE OF POISONING BY ARSENIC,

PRESENTING SOME PECULIARITIES.

By M. M. DE BARTOLOME, M.D., Sheffield.

(Read before the Sheffield Medical Society, Oct. 2nd, 1848.)

The destruction of human life by the agency of poison has of late years been most lamentably on the increase, and although the improved and daily improving state of chemical science fortunately enables us to ascertain with ease and certainty, (at least in the case of mineral poisons,) the precise poison employed, yet cases are now and then met with presenting certain anomalies, either in the *post-mortem* appearances, or in the results of the analysis by which we endeavour to detect the poisoning agent employed. Conceiving that it is the duty of every medical man to lay any such cases which may fall within the scope of his observation before the profession generally, I am induced to bring before this Society the following case, and in doing so, I shall endeavour to call your attention to those points of resemblance to, or deviation from, the usual routine of similar cases:—

The subject of the melancholy investigation which I am about detailing, was Mary S., a scissor-burnisher. It appears from the evidence at the inquest, that an improper intimacy had for some time existed between her and an apprentice, who was frequently employed in the same room with her, the result of which was her becoming pregnant; and it likewise appears that she had frequently expressed her determination never to become a mother, although both the lad by whom she

was "*enceinte*," and another man with whom she "kept company," had often expressed a willingness to marry her.

On Wednesday, August 16th, 1848, she left her home about 7 p.m., and returned about 9 p.m., during which absence it is supposed she procured the poison, either by buying it herself, with a view to self-destruction, or by having it from some one with the intention of inducing abortion. On this point we are completely in the dark, for although the police enquired at more than fifty druggists' shops in the town, not the slightest information could be gathered by them, either to establish the fact of her having bought the poison herself, or tending to criminate others. On her return home she complained of being very ill, and her mother made her some gruel, into which it is presumed the poison was put by herself. On the following day, as she continued very unwell, her mother gave her some Epsom salts, and again on the Friday, her suffering still continuing, her mother gave her some castor oil; but no one having any suspicions of the real state of matters, no medical man was sent for until about ten minutes before her death, which occurred on Friday, August 18th, at 8 p.m., although vomiting and purging had existed, almost without intermission, for upwards of twenty-four hours. Mr. Martin having been sent for, and being from home at the time, Mr. Newton, his assistant, saw her, as I have stated, about ten minutes before her death, which actually took place while he was still in the house.

On Sunday, August 20th, 1848, at 9 a.m., thirty-six hours after death, the body was inspected by Mr. Martin and myself, assisted by Mr. Newton. The body externally presented no marks of violence, but it was much ecchymosed from gravitation. About midway between the pubis and umbilicus a tumour was felt, like a truncated cone, which, on removing the abdominal parietes, proved to be the uterus, evidently in an impregnated state. The head externally presented nothing abnormal. On the surface of the brain there was a good deal of venous congestion, and its substance presented a much greater number of bloody points than natural. The ventricles contained about half an ounce of serum each. The cortical matter of the cerebellum was more injected than that of the cerebrum; the medullary less so. *Thorax*:—The right lung was perfectly healthy and crepitated freely; the pleura on the same side was healthy; the left lung was likewise healthy, and crepitated freely, but the left pleura was adherent all over its surface. The heart was rather larger than natural, particularly the right side; otherwise apparently healthy; on cutting into it, however, its substance was found very flabby, and its cavities filled with coagula—particularly those of the right side. The valves were all perfectly healthy. *Abdomen*:—The peritoneal coat covering the fundus uteri was more injected than natural, and in some places ecchymosed, giving the viscus a mottled appearance. The fundus uteri, at its broadest part, was about seven inches in diameter, and from the fundus to the os uteri the distance was nine inches. On cutting through the fundus uteri an ecchymosed

patch, about three inches by one and-a-half inch, was seen between the membranes on the middle of the anterior surface, and another similar patch lower down. The placenta extended across the cervix uteri, and was partially separated. The membranes enclosed a fœtus, eleven inches long, and apparently from five to six months old. The stomach and bowels were distended with gas; the peritoneal coat over the large curvature of the stomach, and on the right side, presented many congested patches of various sizes, from half an inch to an inch in diameter. These patches nearly coalesced, so as to give the stomach the appearance of general external congestion over an extent of about four inches by two. The large intestines were healthy externally, but the small were rather more injected than natural. The liver was very pale, and rather mottled; its edges attenuated and condensed. The right kidney was gorged with blood; the left not so much congested. The stomach and its contents, as well as the contents of the intestine, were removed for examination. The intestines internally were, generally speaking, healthy, but rather exsanguine, except here and there a slight ecchymosed patch of no importance. In almost every portion of the intestines a yellow gritty matter was found in considerable quantity, and perfectly detached. *Stomach internally*:—The mucous membrane presented several highly congested patches, some of which corresponded with the congestion observed on the peritoneal coat, whilst others were independent of it, but all of them appeared upon the pyloric end of the stomach. In no part of its surface was the mucous membrane ulcerated. Along the lesser curvature of the stomach a yellow gritty matter similar to that seen in the intestines was found in considerable quantity. So far as we could judge by the eye there were at least twenty grains of this substance altogether. It presented the colour and general appearance of sulphuret of arsenic, and was of an homogeneous colour.

This substance, on being analysed by us, proved to be the sulphuret of arsenic. On its being simply heated in a tube, with charcoal and carbonate of soda deprived of its water of crystallization, a metallic ring was produced, presenting all the characters of metallic arsenic. Another portion heated with the same flux, in a tube open at both ends, sublimated into arsenious acid, which, on being dissolved in boiling distilled water, gave with the liquid tests the most conclusive evidence of the presence of arsenic. Another portion of this yellow matter was boiled in distilled water, filtered, and the tests applied to it, but without any satisfactory result, even after the addition of caustic ammonia. A portion of the liquid contents of the stomach and intestines was then filtered and the tests applied as before, without detecting arsenic. Another portion was boiled in diluted muriatic acid, and properly prepared animal charcoal, and then filtered. This was divided into two portions—one was simply tested as usual by all the liquid tests, and to the other caustic ammonia was first added and then tested; but in neither case was the least trace of arsenic found.

Some of the charcoal left upon the filter was next dried and put into a tube with desiccated carbonate of soda, and on the application of heat the metallic ring and likewise a ring of arsenious acid were produced; and on the latter being boiled in distilled water, and tested in the usual way, the most satisfactory evidence of the presence of arsenic was obtained. A small quantity of the same charcoal was then treated with caustic ammonia, and on being tested produced the same results.

I may here mention, that the tests used in the different processes detailed above were—Ammonio-Nitrate of Silver; Ammonio-Sulphate of Copper; Sulphuretted Hydrogen; Lime Water; Bichromate of Potass.

From a careful consideration of the foregoing facts I am decidedly of opinion that the form of arsenic taken was the sulphuret, at all events that it was not arsenious acid; and to this conclusion I am led, both by the results of the chemical analysis carefully performed, and by the *post-mortem* appearances. I am further inclined to think that it was a native and not an artificial sulphuret, because of the length of time the patient lived after taking it. Native sulphuret of arsenic is nearly, if not quite, insoluble in water, whilst the artificial sulphuret generally contains as we shall presently see, a considerable portion of arsenious acid.

The results of the chemical analysis clearly proved that the liquid contents of the stomach and intestines contained no arsenic in a soluble form, but merely held in mechanical suspension; and hence we find that although the solid matter left upon the filter gave both by reduction and by the liquid tests after solution in ammonia, convincing proofs of the presence of arsenic, not the slightest trace of this metal could be detected in the filtered fluid. Again, the gritty yellow matter so abundantly found in the stomach and intestines, was of an homogeneous yellow colour; and we can scarcely imagine a state of the digestive organs so totally depraved as to produce a quantity of sulphuretted hydrogen sufficient to change the whole of the arsenious acid taken, into the sulphuret of arsenic, in the short space of two days.

Christison, speaking on this subject, says, "Sulphuret of arsenic sometimes exists in small quantity in the stomach although the poison was given in the form of oxide." And in the account of a case examined by Professor Traill of Edinburgh, five months after interment, we are told, "the contents of the stomach consisted of a considerable quantity of yellow sandy matter, of the consistence of paste. The contents and adhering crusts were found to consist chiefly of oxide of arsenic partially converted into sulphuret. If five months were not sufficient time to convert the whole of the arsenious acid into sulphuret, and the crusts were only partially so converted, we cannot, I think, suppose that two days could by any possibility be sufficient to perfectly effect the change and leave no vestige of the original arsenious acid."

The appearances found after death seem, in my opinion, to lead to the same conclusion,—viz., that the metal was not taken in the form of oxide, for they

were by no means such as are generally found in cases of poisoning by arsenious acid; and indeed, some of them are diametrically opposed to those described by some authors; I shall, therefore, claim your indulgence while I briefly notice some of the most remarkable, as nearly as possible, in the order in which we observed them.

The peritoneal covering of the stomach, as already stated, was found considerably congested—an appearance seldom found according to Christison, for he says, "It is singular that, however severe the inflammation of the inner membrane of the stomach may be, inflammatory redness of the peritoneal coat is seldom found; yet inflammatory vascularity does occur sometimes on the peritoneal coat."

The mucous membrane has been represented by various authors as being in such cases soft, brittle, and easily separable. In the instance at present under consideration, the contrary was the case, for this membrane was quite as firm as usual—a state which certainly tends to strengthen the supposition that the poison taken was not arsenious acid; for it is, I think, very improbable that any arsenious acid could have remained for two days adhering to the mucous coat of the stomach without causing a more violent degree of inflammation than was observed in this case, and without inducing the more or less extensive destruction of the mucous membrane.

Speaking of the effects of arsenious acid upon the intestines, Christison says, "It is a curious fact, that the rectum is sometimes much inflamed, though the colon, and more particularly the small intestines, are not." Dr. Male and Dr. Baillie have recorded cases in which the rectum was redder than the stomach itself, and the anus ulcerated, and even in a state of gangrene. Bachmann and others have stated that they have found the external parts of generation much congested, and in females even in a state of gangrene. In the case of Mary S., the contrary was observed. The small intestines alone were more injected than natural, whilst the large intestines, the anus, and the external parts of generation, were perfectly healthy.

Pyl relates a case in which the inside of the uterus and Fallopian tubes was inflamed, and this certainly agrees with the condition in which those parts were found in the present case.

The lining membrane of the heart is represented by some authors as being unusually red, and Brodie and Wildberg assert that the blood of animals killed by arsenic is commonly fluid, whilst, on the other hand, Wepfer, Sproegel, and Jaeger, state that it is black and semigelatinous. If our case is to decide between these authors, we must pronounce them all right and all wrong, because we found the blood contained within the heart coagulated, but rather florid than otherwise—certainly not black.

It may be urged by those gentlemen who may differ from me in opinion as to the form of arsenic taken in this instance, that the sulphurets of arsenic are not so easily procured as the arsenious acid itself, nor so likely to be known as poisons by the vulgar; but this objection loses much of its force, when we remember

that in the celebrated Bristol case, published by Dr. Symonds, it was proved at the trial, "that the poison used was artificial orpiment."

Dr. Duncan met with an instance of an attempt to poison by mixing King's yellow with tea. Another case is related by Christison, in which King's yellow was intentionally taken in Edinburgh, and proved fatal in thirty-six hours; and another which occurred at Glasgow, in 1822, where a woman was tried for poisoning her child with the same substance.

In the Bristol case death took place within a very few hours, and on a sample of the poison obtained at the same druggist's shop where the fatal dose had been bought, being analysed, it was found to contain no less than 79.100 of arsenious acid. This was probably the case in the instance given by Christison, as occurring in Edinburgh, in which death took place in thirty-six hours.

In conclusion, I will merely mention that Hahnemann, who is generally considered as having over-estimated the solubility of the sulphurets of arsenic, states that native orpiment is soluble in 5,000 parts of boiling water, and the artificial in 600, a difference in solubility which could only be accounted for by the fact already named, that the artificial orpiment contains a large proportion of arsenious acid, which is soluble in 16 parts of boiling, or in 100 parts of cold, water. It is now, however, pretty generally supposed, that Hahnemann was mistaken, and that the sulphuret is not dissolved, but decomposed by the water, which, by giving it its oxygen, converts it into arsenious acid, the hydrogen and the sulphur set free by this double decomposition, forming sulphuretted hydrogen, which is then evolved.

I had almost forgotten to call your attention to the enormous quantity of the poison which this unfortunate girl must have taken, since, although vomiting and purging had continued almost without intermission for upwards of twenty-four hours before death, so large a quantity as twenty grains was nevertheless found in the alimentary canal.

ON THE MINUTE ANATOMY OF THE AIR-CELLS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

It is at present a disputed point in microscopic anatomy, whether there exists any epithelium on the internal free surface of the air-cells of the lungs. In his interesting paper "On the Minute Structure of the Lungs,"* Mr. Rainey has confirmed the opinion that the ciliated epithelium does not extend farther than the point at which the bronchial tubes terminate abruptly in the intercellular passages, "after which the passages conducting the air continue in the same direction as the bronchial tubes, of which they are the continuation, but without having any perceptible membranous

* Medico-Chirurgical Trans., Vol. xxviii., p. 581. 1845.

lining, their parietes being formed merely by the air-cells between which they pass, and by which they are surrounded." Mr. Rainey subsequently remarks that "those parts in which the aeration of the blood more particularly takes place, are lined only by a very thin fibrous membrane," and explains away Mr. Addison's observation of round nucleated epithelial scales in the air-cells, by assuming that that physiologist mistook the remains of nucleated cells in the walls of the capillaries for epithelial scales.

Having taken some pains to investigate the minute anatomy of the lung, I believe the following to be a correct statement of the facts:—

The columnar ciliated epithelium terminates with the termination of the bronchial tubes, precisely as Mr. Rainey so clearly describes, but beyond this the basement membrane of the intercellular passages and of the air-cells is covered with a delicate transparent pavement epithelium, the individual scales of which are irregular in shape and size, and present a single nucleus in each, not, I believe, "from one to fifteen or more nuclei" in a single scale, as Mr. Addison states.

The proof that these scales are not situated within the capillaries, is furnished by the circumstance that a portion of them may be displaced from the surface of the object without injury to the tissue.

In outline, as in size, the scales vary greatly, but are never exactly either circular or oval. They always present angles at some part of their circumference. The pentagonal is a common variety.

Non ciliated pavement epithelium exists in the air-bladder of fishes, in the lung-sac of reptiles, and in the air-cells of the lungs of birds and mammals. I have drawings and dimensions of it in each of these organs, but as I wish to view the objects with polarized light, which at present I have not been able to do, I defer a more particular description to a future opportunity.

The precise mode of termination of the circular muscles of the bronchial tubes has not hitherto been described. These fibres, being external to the longitudinal fibres of yellow elastic tissue, cease where the longitudinal fibres divaricate to bound the air-cells, into the walls of which they enter in sweeping curves. In the bronchial tube the longitudinal fibres are packed side by side, and pursue a straight course; where the tube ends in the intercellular passage, the longitudinal fibres immediately spread out, separating from each other to form the frame-work and support of the membrane which constitutes the wall of the intercellular passage and air-cells. The bronchial muscles ceasing with a defined edge at the end of the bronchial tubes, are prevented by the spreading out of the longitudinal fibres around the intercellular passages and air-cells, from ever acting like a sphincter muscle at this point, which, had the elastic fibres been external to the muscular instead of internal, might probably have sometimes taken place, to the great detriment of respiration.

I am, Sir,

Your obedient servant,

C. RADCLYFFE HALL.

Holmes Chapel, Cheshire,

December 6, 1848.

PROVINCIAL Medical & Surgical Journal.

WEDNESDAY, FEBRUARY 7, 1849.

We have on various occasions reported the case of "*Cox v. the Midland Railway Company.*" The action was brought by Professor Sands Cox, of Birmingham, to recover from the Midland Railway Company, the amount of his charge for professional services, rendered at the instance of the Company's servants, in the case of an accident occurring to a passenger on that line. For reports of the original trial before Mr. Justice Maule, and of the subsequent proceedings, we must refer to former numbers of this Journal. We have now to announce the decision at which the Court of Exchequer has arrived in this important case. The law of the land in reference to all such matters is thus laid down by Mr. Baron Parke:—

"The Court was unanimously of opinion that no power to enter into any such contracts as those on which these actions were brought, was incidental to the employment of a guard or superintendent of a railway company. Those servants did not stand in any different position from that occupied by the servants of any other company or partnership, or of any individual. It could never be contended that if a passenger fell from the roof of a coach and suffered a severe injury, the coachman had any implied authority to bind the owners of the coach to pay for any professional aid which he on the instant might think proper to call in for the relief of the passenger. Such a contention could not be maintained in the opinion of the whole Court; for, though it might be that the owners would be benefitted by such contract if they were liable to the passenger for the accident, it would, on the other hand, prejudice them if they were not so liable. A servant, therefore, clearly had no such power of pledging his master, for he received from them only that extent of authority which was necessary for the discharge of the duties required of him under ordinary circumstances. When extraordinary events occurred which required an excess of those ordinary duties, it was the duty of the servant to apply to his employers for further powers, and he could not bind them if he assumed them without such application."

We are, hence, we presume, to infer that a passenger, or any number of passengers, who may be placed in various circumstances of danger, however imminent, from the result of a collision or other railroad accident, are to be left in that situation, if unable of themselves to apply for, or authorize the application for, such surgical assistance as their case may require, until the superintendent or other officer of the Company shall have summoned a Board of Directors to obtain the necessary powers. Any surgeon obeying the summons of the

railway officers to such an accident, and bestowing his services under such authority, must now be understood to render those services gratuitously, with the further certainty also, in the event of his attempting to enforce his just claim for remuneration, of a heavy pecuniary loss in the shape of legal expenses.

It will be remembered that on the original trial, in which the verdict was given in favour of the plaintiff, Mr. Justice Maule, who presided on the occasion, recommended that a notice should be put up by the company, that "no medical assistance would be rendered on this line in case of accident." This suggestion, sarcastically made by the learned judge on that occasion, has, as is observed in an able leading article on the subject in the *Times*, now received the deliberate sanction of a well-considered judgment of one of our superior courts. Such it appears is the law of the land, and our contemporary may well question whether it should remain so one moment longer than the time which may be necessarily devoted to its extirpation.

Such a change in the law as is here intimated, desirable or rather imperatively necessary though it be, will not, however, meet the exigencies of the present case, nor place the gentlemen who compose the Board of Management of the Midland Railway Company, on a reputable footing with the public. We have no acquaintance that we are aware of, with any of these gentlemen. We do not even know their names, but we have no doubt that they are "all honourable men," and we deeply regret that on their public character should rest such a stain as the whole circumstances of the present proceeding cannot but entail. Take for instance the subjoined features in the case, which we extract from the columns of a Birmingham newspaper:—

COX v. THE MIDLAND RAILWAY COMPANY.

To the Editor of Aris's Gazette.

SIR,—As the case may receive some notice in your next paper, I shall be obliged if you will allow me to state that before I brought this action I knew that the Company's servants had employed Mr. Cox, and that Higgins had been induced to compromise his claim for £150 only, on condition that the defendants "should pay the medical and surgical charges." The only defence I heard of was, that Mr. Cox's charges were unreasonable.* At the trial I had abundant evidence to show they were not; and Mr. Humfrey (defendants' counsel,) said he had no complaint to make on that head, but that the defence was, that the Company's servants had no authority to employ Mr. Cox; and, on referring to

their undertaking to pay, I was answered that the Company had not authorized their Counsel to make any such promise.

I am, Sir, your obedient servant,

JOHN SUCKLING.

Cherry Street, Jan. 20, 1849.

* Mr. Cox's charges for amputation, and attendance during the whole of the night, were £21, and £3, 3s. each for two subsequent attendances, a distance of ten miles from Birmingham.

COX v. THE MIDLAND RAILWAY COMPANY.

To the Editor of Aris's Gazette.

SIR,—Assuming that you will notice the decision of the Court in this cause in your paper on Monday next, I think it right, as the attorney of the poor man Higgins, who received £150 from the defendants by way of compromise for the loss of his leg, that the public should be acquainted with the fact that I declined to advise Higgins to settle the action for that sum, unless the surgeons' and innkeeper's bills were paid; and upon the promise of defendants' Counsel that the £150 should be "*exclusive of medical and surgical charges and innkeeper's bill*," which the Company should pay, I was induced to settle upon such terms.

I am, Sir,

Your obedient servant,

GEORGE CHILWELL.

Birmingham, Jan. 20, 1849.

Now, we beg to ask,—first, whether, in conformity with the terms of the compromise, the Company have paid the innkeeper's bill; secondly, whether they, in violation of those terms, have thrown that bill on the poor disabled sufferer Higgins, leaving him the chances of an expensive legal process for compelling them to abide by their compromise in this respect; and thirdly, if they have so paid the innkeeper's bill, on what principle do they refuse to defray the charges for medical and surgical attendance, seeing these were also included in the terms of the same compromise.

They may possibly avail themselves, and legally, of the decision which they have just obtained in the higher courts; but if they do not discharge the surgical expenses, and moreover, reimburse Professor Cox to the full amount for the expenses to which he has been put, by the legal processes rendered necessary to establish the principle, for which we presume they can alone have been contending, their moral code of action will be, to our apprehension, of a very peculiar nature indeed, and such as we should ill like to trust to, in any dealings, public or private, with our fellow-men.

By a notice which appears in our advertising columns, our readers will find that the General Meeting of the Poor-Law Medical Officers is now

appointed to be held on Monday, the 19th inst. The meeting is one of no ordinary importance, as the present seems to be the time when a strong appeal to Parliament, well-backed by the profession at large, may be expected to lead to some amelioration of the system at present pursued.

Reviews.

The London and Provincial Medical Directory. 1849. pp. 532.

The principal alterations which we observe in this most useful work are the omission of the Medical Diary and the insertion of a Street List of the Medical Practitioners of London and its suburbs. The work is, moreover, evidently more complete than its predecessors, as we judge from the increase in the number of its pages, amounting to nearly one fourth more than those of the Directory for 1848, which, through the arrangements of the publisher, are yet comprised within a smaller bulk, so as not to interfere with it in any respect as convenient for reference. Our readers may rest assured that they will not only meet with much information on various matters connected with the profession and its members, but that until a legal and compulsory system of registration shall be adopted, no more efficient method of marking the genuine qualified practitioners could well be devised. Imperfections and errors may indeed occasionally be detected, and in a work of this kind it is most important that they should be as few as possible, but in many of the instances which might be referred to they are rather owing to the neglect of the instructions sent in the circulars for information, and can scarcely be attributed with justice to the Editor, who we firmly believe has exercised as much care as the nature of the undertaking would admit of.

Medical Portraits.

We have received two more of these interesting memorials of eminent members of the profession, executed by Mr. Macguire, in the same style of excellence as those already published. The portraits of Dr. Forbes and Dr. George Budd will both prove acceptable to the subscribers to the work, but that of Dr. Forbes will be especially so to the members of the Provincial Association, to so many of whom he is well known, and by all highly appreciated. The likeness has every appearance of being a faithful one, and it is with some shade of melancholy that we say so, as in contemplating the deeply intellectual features of our esteemed friend, we cannot but feel that the two or three years which have intervened since we last saw him, have not passed without leaving their traces on his countenance.

Proceedings of Societies.

BIRMINGHAM PATHOLOGICAL SOCIETY.

November 2nd, 1848.

W. C. FREER, Esq., in the chair.

PERFORATING ULCER OF THE STOMACH.

The preparation had been given to Dr. Russell by Mr. Simons, who attended the case, and furnished the following report:—

A woman, aged 24, single, chlorotic, with deficient and irregular menstruation; she always complained of pain in the region of her stomach after food, and thought herself troubled with worms; was always in the habit of taking medicine. October 27th. She got up in her usual health; whilst rubbing the fender was seized with sudden violent pain in the region of the stomach; this was about 8 a.m. She said that something had given way inside her. The pain increased. Mr. Simons was sent for about 1 p.m. He found her with her body and face cold; a clammy perspiration had broken out over her; pulse excessively feeble; face very pale; nausea, but no vomiting, nor did vomiting occur at all; violent pain extending over the whole abdomen, which was tender, and seemed distended. He ordered fomentations, and prescribed ammonia and opium. A few hours after he found her somewhat easier, but still making great complaint; some re-action had taken place. She was very anxious to have her bowels open; so, fearing what the case was, Mr. Simons only prescribed some rhubarb and carbonate of magnesia, in peppermint water. In one or two hours after, she passed one healthy solid stool, and felt relieved. During the night a woman slept in the same bed with her; this woman awoke at 4 a.m., and found her quiet, as she supposed. She again awoke at 7, and found her dead and cold.

Sectio cadaveris, sixty hours after death. A tolerable amount of fat in the subcutaneous cellular tissue. *Heart and lungs* healthy; coronary vessels loaded with blood. About three quarts of fluid in the cavity of the abdomen; this fluid consisted apparently of what had been swallowed; it did not contain any lymph. *Stomach* about the ordinary size; at the cardiac extremity, in the anterior wall, near the small curvature, was a perforation; exteriorly the aperture almost admitted a lead pencil; the ulcer in the mucous membrane and muscular coats, was the size of the end of one's finger; the coats of the stomach were generally thicker than natural; the mucous membrane around the aperture was firm; no injection of the mucous membrane, nor any cicatrix nor other ulcer. *Intestines* healthy externally. *Liver* rather small, pale; its cut surface unusually smooth; the acini less distinct than natural. The microscope detected a considerable quantity of fat in the cells of this organ. *Uterus* healthy.

Mr. Wickenden remarked that these accidents generally occur in chlorotic girls and young women. He referred, however, to a case in a married woman, in whom death took place eleven hours after symptoms of

perforation came on; the symptoms set in immediately after a walk taken on a full meal. The ulcer was in the posterior wall.

Mr. W. H. Partridge mentioned another case in an old gentleman.

Dr. Fletcher remarked on the sensation of "something having given way in the stomach," not being pathognomonic of perforation of the organ. He detailed a case in which the sensation occurred, with every other sign of the accident in question, but to his surprise the patient recovered. He supposed it to be an hysterical affection.

PERFORATING ULCER OF THE STOMACH.

Mr. Hinds related the particulars of the following case:—

Sarah Ann Brandwood, aged 18, had suffered for a considerable period from pains of the stomach, for the relief of which she was in the habit of taking quantities of black pepper. It appears she was somewhat chlorotic, and the catamenia had not been present during eleven months. On Friday, October 27th, she was attacked immediately after her tea with vomiting, epigastric pain, and great depression of the vital powers. She was immediately brought home from her employment (that of a button-maker,) and after her arrival vomited several times. During the following night she suffered severe pain in the stomach, and could not sleep. I was called to see her about the middle of the next day. She was dressed, and sitting at the table down stairs. Her tongue was slightly coated with a brownish fur, and she was somewhat feverish. Some complaint was made of pain in the stomach. There was evidently some abdominal tenderness, though being dressed she was not very carefully examined in this part. The pulse was weak and small; bowels not open since yesterday morning. She had taken a teaspoonful of pepper, and some brandy, an hour or two previously.

R. Hydrarg. Chlor., gr. iij.; Pulv. Opii, gr. j.; Extr. Papav., q. s. Fiat pil. statim sumend. R. Liq. Ammon. Acet., oz. iss.; Sp. Æth. Nitr., dr. ij.; Mist. Camphoræ, oz. viiss. M. Cap. oz. j., quartis horis. Sinapismus abdomini applicandum.

Having gone to bed, by my direction, soon afterwards she became worse, and died at six o'clock the same afternoon.

Section cadaveris, thirty-seven hours after death. Stature short, well formed; mammary glands not much developed. Some tympanites of abdomen, at the most superior part, and which was a good deal distended. The abdomen having been cut into, serum and other fluid flowed out profusely, and about two quarts were removed from the cavity. Some vascularity was observed on the small intestines, with slight portions of lymph in some parts. In the anterior part of the stomach, and about an inch and a half below the cardia, a circular orifice was found, communicating with the interior, and from which half-digested food flowed freely. The size of the hole was about that of a large pea. Around the orifice, on the peritoneal surface, distinct appearances of inflammation existed. There was no adhesion whatever to any adjacent part. The whole parieties of

the stomach were hypertrophied, being at least twice their natural thickness. The mucous surface was almost uniformly pale, and the excavation at the seat of the peritoneal laceration did not exhibit any vascularity, or differ in appearance from the adjacent parts. The uterus was of the ordinary size, as seen in the virgin state. The ovaries were externally congested in patches, and contained several largely developed Graafian vesicles, and some appearances of a false corpus luteum. The other organs were healthy.

In regard to the pathology of this disease, as it exists in young women, who, there is reason to believe, furnish a considerable proportion of these cases, it may be well to ask whether any and what relation exists between these excavated ulcerations of the stomach and certain states of the uterus. In relation to certain anæmic states of the body, there appears to be little difficulty. Anæmia is well known to favour local congestion and subsequent chronic inflammation, and when it is considered that the stomach is so intimately connected with the uterus, by means of the sympathetic system of nerves, local congestion of the stomach must certainly be looked upon as by no means surprising. In this case it is rather remarkable that the whole parieties of the stomach were, at least, double the ordinary thickness, with scarcely any appearance of vascularity. There was no other ulcer nor excavation in any part in this case, which is somewhat curious; and the progress of the only one present, through the whole of the tissues down to the peritoneum, must evidently be in reference either to certain portions of food, or the action of the secretions of the stomach itself, on tissues which had become originally deprived of the mucous membrane, and which were not so capable of resisting that action as the mucous coat itself.

DISORGANIZATION OF THE KIDNEYS IN A PATIENT WHO DIED SUDDENLY.

Mr. Carter narrated the following case:—

J. R., aged 60, staying at a lodging house, and apparently in very destitute circumstances, without having made any complaint of ill health, except pain in the chest on the second night previous to death, was found dead in his bed.

Section cadaveris. The arms were bent on the chest, and the hands clenched, as though some severe pain in the chest had occurred at the moment of death; no pleuritic adhesion; lungs very large, healthy, with the exception of some emphysema in the free margins. Heart enlarged and soft in texture; valves healthy; left ventricle much enlarged, but the walls thin and soft; only a small quantity of fluid blood in the heart. Stomach empty, but very much congested, particularly the cardiac end. The kidneys greatly diseased; the right small, the left considerably enlarged; both permitted themselves to be squeezed out of their capsules, when the latter were opened, as though quite unconnected with them; they were of a deep red colour throughout, extremely soft and friable; the right retained little of the healthy structure; its tissue seemed almost disorganized; the left differed only in retaining one or two bundles of straight tubes, deeply

tinged with red, and distinguishable from the surrounding distension of the tissue. Decomposition was proceeding with great rapidity, although the *sectio cadaveris* was made soon after death.

**FEVER: SUDDEN DEATH IN FOUR WEEKS FROM
PROFUSE HÆMORRHAGE FROM THE BOWELS:
EXTENSIVE ULCERATION OF THE ILEUM.**

Mr. Brindley communicated the particulars of the following case:—

Mr. G., aged 55, a smith, robust, industrious, and temperate, of good general health, had an attack of diarrhœa in the second week of September, subsiding in two or three days. About the 17th, was seized with shiverings, followed by the ordinary symptoms of mild continued fever. No prominence was given to any particular symptom, except that there was much nervous depression and mental despondency. Some blood was observed in the evacuations once, about the end of the second week, with a tendency to looseness of the bowels. From the 6th to the 10th of October the bowels were not moved, and a dose of castor oil was given, after which he was moved two or three times daily. No delirium nor abdominal tenderness. (Mr. Williams and Dr. Fletcher had attended the case up to this time.)

October 13th. I first saw the patient with Mr. Thomas Chavasse. He made no particular complaint; was rather dull and heavy; had been a little deaf for the last few days; respiration somewhat accelerated; pulse 120, full, and of good strength; skin moist and perspiring; tongue covered with thick greyish fur at the middle, clean at the sides; bowels moved two or three times in the night: the last stool thin, dark, and contained several large, loose, black coagula; abdomen full, but soft, and not tender. Chest a shade duller throughout the right side, and respiration more feeble posteriorly, but there was no abnormal bruit; urine of good quantity, acid, turbid from deposit of urates, no albumen; head tolerably clear; no delirium, but a good deal of nervous depression.

14th. Comfortable night; three copious evacuations, fluid, but holding a large quantity of fecal matter, and containing no blood; feels relieved; tongue slightly aphthous; pulse less strong; no abdominal tenderness.

October 15th. Summoned in haste at 6 a.m., and found him dying. He had passed at twice about three pints of black blood, after which he became delirious, fainted, and was with difficulty got into bed; was pulseless, with cold extremities, slow respiration, and exsanguine state of lips and of general surface. He swallowed a little brandy, but expired in a few minutes.

Autopsy twenty-five hours after death.—Body well covered with fat. Head not examined. *Heart and lungs* sound, except some serous infiltration into the posterior part of the right lung. *Abdomen*: Liver of ordinary size, pale, soft in texture; gall-bladder contained a small quantity of thin, pale, yellowish fluid; spleen, pancreas, kidneys, stomach, duodenum sound; in the lower part of the ileum were numerous ulcerations, increasing in size and number as they approached the valve, where also were two or three small ulcers.

They measured about two feet from the termination of the gut, and were situated in Peyer's glands. At the upper part the enlarged glands were distinct; the solitary glands, here and there one, having in the centre a deep ulcer, in some very small, in others large; a few tumefied, but not ulcerated. In Peyer's glands, lower down, the sloughing process was more advanced, exposing large, red, irregular, and ragged surfaces, strewed over with small coagula. In several of these the sloughing had extended to the peritoneum, which externally had an opaque thickened appearance, from a deposit of lymph in small points, limited to the spots ulcerated, but nowhere adherent to adjacent parts. The ulcers did not extend beyond the valve. About half a pint of blood in the ileum and colon. Coats of the colon congested. The mesenteric glands opposite the ulcerations red and congested, with congestion of the vessels going to them. These effects were most marked opposed to the most advanced ulcerations. A long band, a prolongation from the great omentum, stretched downwards from the lower border of the stomach, and firmly adhered to the mesentery opposite the top of the sacrum.

(To be continued.)

Foreign Department.

ON THE SOURCE OF SUGAR IN THE ANIMAL ECONOMY.

By DR. BERNARD.

(Translated for the Provincial Medical and Surgical Journal,
from the Archives Générales de Médecine.)

Sugar is extensively distributed throughout the vegetable kingdom, but it exists also in animals. Vegetables do not find it ready made in the earth, but form it by some power of internal organization. Is it the same with animals? or is the sugar found in their bodies exclusively the product of their vegetable ingesta? This is the important question which it is our intention to submit to the test of experiment.

Sugar enters largely into the composition of the food of animals. The kinds of sugar are,—1st, Cane sugar, such as is found in the sugar cane, beet-root, carrots, &c. 2nd, Grape sugar, such as exists in grapes, and other saccharine fruits. Fecula should also be considered as saccharine matter, inasmuch as it is convertible into low sugar during the process of digestion. 3rd. Sugar of milk, which is found in the milk of animals.

This is not the place to trace the distinctive characters of these forms of sugar, nor to determine the alternate changes which they undergo in order to become subservient to nutrition. I need only state, that as certain alimentary substances are known to furnish considerable quantities of sugar, we may consider them as the source of the saccharine matter which we discover in the blood or other animal fluids. It is admitted that sugar is to be found in the healthy blood, after the ingestion of sugar, or matters convertible into

sugar. But chemical facts teach us on the one hand, that starch is the only principle which is convertible into sugar, and on the other hand, in the belief that the animal economy has not the power to originate a principle, but only to transform those which are presented by the vegetable kingdom, it has been denied that the animal organism can form sugar, and the only power recognized is that of destroying and eliminating it. The facts which will be developed in the following essay shew us that such an opinion is not warranted by physiology:—

FIRST SERIES OF EXPERIMENTS.

It has been observed, that during the digestion of saccharine or amylaceous matter, the blood contains sugar, and it has thence been concluded that the sugar is furnished by the aliments. This result of experiment taken alone is exact, but the experiment itself is incomplete, and the conclusions therefore false, as will be seen.

1st *Exp.* I injected thirty grains of starch dissolved in a pint of water, into the stomach of a rabbit which had eaten oats and carrots. Five hours after, the animal was destroyed in the usual way, and thirty grains of blood from the heart collected. After coagulation, sugar was distinctly found in the serum. The stomach and intestines contained sugar arising from the carrots and the transformation of the farina.

2nd. *Exp.*—A strong dog was destroyed five hours after eating 300 grains of the jelly of starch. The serum of the blood taken from the heart contained a notable quantity of sugar. The contents of the stomach were acid and contained no sugar; those of the intestines were alkaline and strongly saccharine.

3rd *Exp.*—A dog ate plentifully of sheep's head and was killed after seven hours. In the serum of the blood sugar was distinctly found. No sugar was found in the intestinal canal.

4th *Exp.*—A dog was killed after fasting two days. Sugar was unequivocally found in the serum.

The above experiments were repeated several times and always with the same results. The general fact established is readily seen,—viz., that sugar is constantly present in the blood of animals, whatever has been the nature of their food.

SECOND SERIES.

Whence is the sugar derived in the case of the animals fed on meat, and in that which had not eaten for two days previous to death? This is the question for the solution of which fresh experiments are required. It may be fairly presumed that the sugar was not formed in the heart, but had been transported thither from some other parts of the body. To determine more exactly the locality of its formation. I performed the following experiments:—

1st *Exp.*—A large strong dog being killed seven hours after a hearty meal of cooked meat and bones, digestion was found to be in full operation, and the gastrointestinal circulation, and chyloferous ducts fully distended with their respective contents. I obtained,—1st, some blood from the junction of the splenic vein, with the vena portæ; 2nd, some chyle from the

thoracic duct; 3rd, blood as before from the cavities of the heart. I then carefully separated the contents of the stomach and bowels, and tested each separately for sugar with the subjoined results:—

1. The alimentary matters of the stomach and small intestines had an acid reaction, and afforded no evidence of the presence of sugar.

2. The milky serum afforded by the coagulation of the chyle was also destitute of sugar.

3. The blood of the vena portæ being allowed to coagulate, the serum was slightly opalescent and alkaline; I distinctly ascertained the presence of a large quantity of sugar.

4. The blood from the heart also presented sugar, but in less abundance.

The experiment was repeated several times, and with always the same result, but without my being able to comprehend how the portal blood should contain so large a quantity of sugar, while none existed in the small intestines. Reflecting, however, that this matter must be derived from some neighbouring viscus, I proceeded as follows:—

Having quickly destroyed a dog which had some hours since fed on matters destitute of sugar or fecula, I opened the abdominal cavity, and placed ligatures,—1st, on the branches of the mesenteric veins, close to the small intestines; 2nd, on the splenic veins, close to the spleen; 3rd on the pancreatic veins; 4th, on the trunk of the vena portæ as it entered the liver. I then collected blood from each of these sources, and examined it. 1. Sugar was not found in the blood of the intestines, nor in their contents. [The original states that sugar *was* found, but this is evidently an error of the press, as appears from the context.—*Trans.*] 2. Sugar was not present in the blood, either of the splenic or pancreatic veins. 3. The blood of the portal veins contained a large quantity of sugar, as did also the tissue of the liver itself.

It was thus made evident that the liver was the source of the saccharine matter. But it must be asked, how is it that sugar is found in the portal veins, for supposing it to be formed in the hepatic glandules, it should be carried into the general circulation by the hepatic veins, and not flow back into the portal branches. This reflux is, in my opinion, easy to be understood, for, in fact, the circulation in the porta is mainly effected by the pressure of the abdominal parieties during life; if, therefore, the pressure be removed as in opening the abdomen, there would immediately be a reflux from the absence of valves in the portal system.

We have ascertained, by the above experiments, that sugar is found in the liver, and is carried into the general circulation by the blood of the hepatic veins, the reflux into the porta being accidental; but we regard this discovery to be so important, that we think it right to state the processes employed in the investigation, in order that others may confirm or confute our conclusions, by following in our footsteps.

TESTS FOR SUGAR IN THE LIVER ITSELF.

A portion of liver is to be beaten in a mortar, and then boiled in a small quantity of water, and filtered.

The filtered liquid possesses all the properties of a saccharine fluid. It becomes darker on boiling with liquor potassæ, and it reduces the double tartrate of potass and copper. If yeast be added at a certain temperature, fermentation ensues; if the fluid be distilled after fermentation, alcohol may be obtained.

The attempt was made to procure sugar in substance by operating on large quantities of liver, but although a fluid of syrupy consistence was obtained, crystallization did not take place.

The recognition of sugar in the blood is a very simple affair; the blood is allowed to coagulate, and the serum placed in a tube furnished with a stopper; to this is added a sixteenth in bulk of the tartrate of copper and potash, and boiled, when a quantity of the salt is reduced, proportionate to that of the sugar present. By this process the smallest traces of saccharine matter may be detected. Both in this test, as well as that by fermentation, it is necessary to operate on the serum while it is fresh, as sugar is rapidly decomposed spontaneously.

We have now traced the sugar of animals to the liver, but we have further to determine whence it is derived. Two suppositions may be entertained; either it results directly from a transformation of certain elements of the liver, or it is derived from the food. It may be said, in fact, that the animals which had been fed exclusively on animal food, or starved, might have eaten fecula or saccharine food the few days previously, and that the sugar thence derived had accumulated and been detained in the liver; and it might be added in support of this view, that the liver is known to retain arsenic and other poisons for a length of time. Without actually denying this view, the following experiments would seem to oppose it:—

1st *Exp.*—A full-grown dog was starved for eight days, and then fed abundantly on cooked meat for eleven days; after this he was destroyed. The blood contained an abundance of sugar. This experiment was repeated several times, and certainly it would appear probable, that sugar derived from food, given antecedently, would have been eliminated after a lapse of nineteen days.

2nd *Exp.*—A rabbit, after a meal of carrots, was subjected to the division of the pneumo-gastric nerves. He was found dead seventeen hours after. *No sugar was found in the blood or liver.* This experiment was repeated with similar results. In both animals the bile, which is generally alkaline, was found to have a distinctly acid reaction.

This effect of division of the pneumo-gastric nerves is remarkable. As a further proof that sugar is found independently of food, I may state that I have found it in large quantity in foetal calves.

From the above facts the author draws the following conclusions:—

1. That diabetic sugar is a normal ingredient in the blood and liver of animals.
2. That the formation of sugar takes place in the liver, and independently of saccharine or feculent food.
3. That this formation of sugar commences before birth.

4. That it is allied to a state of integrity of the pneumo-gastric nerves.

[We have translated this memoir entire, considering it to be very important in its bearing upon the pathology and treatment of diabetes, many of the received doctrines concerning which it must, if verified, tend to subvert.—FOR. ED.]

THE GENERAL MEDICAL ANNUITY OR RELIEF FUND.

TO THE MEDICAL PROFESSION.

Gentlemen,—Throughout society, amongst the arts and sciences, and in every trade and profession, there exist sentiments of mutual and independent succour and assistance, the medical profession alone excepted. There is scarcely any other community, the constitution of which does not embrace a provident and benevolent establishment. How, then, it may be inquired, arises this strange anomaly? Why do the members of the medical profession alone neglect the natural and moral responsibility of anticipating the risks and uncertainties of life and health? Why, of all mankind, are they regardless of the ills to which flesh is heir? Is it because, as a community, they are provided for the downfall of life? Do they enjoy the smiles of fortune without dreading her frowns? Are they collectively possessed of wealth and affluence? Are they competent to command the comforts of life, when age and infirmities press upon them? Can they meet calmly their incompetency for labour and exertion?—anticipate without misgiving and anxiety their second childhood?—and insure to those whom they may leave behind—those who are bound to them by ties the most natural, sacred, and inviolable,—those whose maintenance has devolved upon them,—can they secure to them a defence against the cankering cares of the world?—nay, can they even insure to them the necessities of life, independently of fortuitous or eleemosynary aid? I solemnly appeal, not only to the members of the profession in the United Kingdom, but to our common fraternity throughout the world, and ask,—can you do these things? The history of the profession, the records of mortality, and the experience of mankind, warrant me in saying, you cannot. Surely, then, it becomes us, as a community, seriously to consider these things. It is the bounden duty of every member of the profession to realize this great—this paramount design. Doubtless there are amongst us some few who are what is termed independent of the world. There are those who can allot a portion of their income to the security of ease and comfort, during the infirmities of age,—who can soothe the downhill of life, and soften the passage to the grave; but they constitute an unimportant minority;—they are, in connection with the whole body of the profession, insignificantly small. In Great Britain alone, upwards of thirty thousand medical practitioners toil and wear out their lives, (rendered infinitely shorter by the nature of their employment,) and not more than two or three per cent. of this number could answer in the affirmative the simple but momentous questions raised above. What then must be the prospects and anticipations of men whose occupation constantly associates them

with disease and death,—men whose daily labour embraces the public good,—whose time is devoted to the amelioration or removal of the miseries of mankind,—whose talents render essential aid to benevolence and humanity, and whose services are alike implored by all,—from the monarch on the throne, to the mendicant at the door.

Up to the year 1845, when the grand project of a General Medical Annuity or Relief Fund was originated, through the zeal, the talents, and the philanthropy of Mr. Daniell, of Newport Pagnell, the great body of the medical profession had no efficient available means of anticipating the calamities of time; they had not an opportunity of providing against the uncertainties and casualties of life and health. But the General Medical Annuity or Relief Fund is still in its infancy—is comparatively unknown to the great mass of the profession, and unappreciated by the majority of those who are acquainted with its existence. Shame on the apathy which attaches too frequently to those who personally feel not the necessity of provident forethought; whilst (discreditable to the affluent of our brethren,) the noble, the benevolent, the magnanimous project of securing the well-being of our community is, by too many amongst them, suffered to languish, and its claims are disregarded. It is not, however, out of place to remind, both frequently and forcibly those to whom fortune has been propitious, that their guardian goddess is fickle as well as kind; that riches oftentimes make themselves wings, and flee away; and, judging from the great and universal commercial crisis which at present prevails, it is no Utopian doctrine to assume, that the year 1848 will have left many in poverty and distress, whom it found in happiness and prosperity. To every member of our profession, then, the duty and the responsibility attaches, of furthering the philanthropic project of Mr. Daniell. Every individual in the community is appealed to by the obligations of society, by the claims of sympathy, by the dictates of nature, by the widow's tears and the orphan's cries, to establish and support the General Medical Annuity or Relief Fund. Nor do its claims to support rest alone with the profession; the public owe largely, owe essentially, to the art of medicine. The community in general derive important and indispensable services from our profession. Without health, paltry indeed is the attainment of riches. Deprived of the power of enjoyment, what avails the possession of wealth. That the public is not wanting in acts of charity and benevolence, the enormous sums annually appropriated to scientific and other institutions, abundantly testify; that certain services merit and meet their reward, witness the contributions in aid of the families of those whose lives have been spent or sacrificed in the defence of their country. If an appeal be made to the public, in behalf of a literary or charitable undertaking, it is immediately responded to in a manner becoming a generous and enlightened nation. If the honour of an individual, whose country has derived amusement or pastime from his talents or acquirements, demand the accumulation of hundreds or thousands of pounds, the fund is raised with gratitude and alacrity. But that the claims of the medical profession, for themselves or their families, are totally disregarded, both by

the public and the State, is a painful fact, established by every day's experience.

If a member of our profession becomes disabled, or dies, how unwilling are mankind to acknowledge the claims of his family, even should his disability or death have been occasioned by his devotion to the public good. The case of the late Dr. Lynch is a melancholy and reproachful instance. Seeing, then, that the community at large evince no sympathy with our widows and orphans, that the public disavows its obligations for our services, and disregards our claims, does it not become us, as rational and responsible beings, to secure, by union and forethought, a provision and defence against the contingencies of life? Is it not our duty to provide for those who look alone to us for succour and support, whilst life and opportunity allow? Be it, then, the determination of every one of you, gentlemen, to realize these important designs, either for yourselves or your professional brethren. Let us set our shoulders to the wheel with energy and determination, and in the might and majesty of union our success is certain.

I am, gentlemen,

Your obedient faithful servant,

L. F. CUMMING.

Stokesley, January 9, 1849.

CHOLERA ASSURANCE SOCIETY.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I have sent you some rules and regulations for a "Cholera Assurance Society," a sanitary movement, on the vastly abused and ill-understood "*self-supporting principle*," and which I hope the medical public are now better prepared to appreciate than they were thirty years ago, when I first broached it.

RULES AND REGULATIONS.

"That each head of a family subscribing any sum from sixpence to five shillings weekly, shall be allowed twelve times the amount of such subscription daily, from the time any one or more of his or her family (including servants,) shall be attacked by Asiatic cholera, until the death or convalescence of the patient.

"That there be allowed for the funeral expences of each parent of a family, subscribing any sum from sixpence to one shilling weekly, the sum of £3; and where such subscription shall exceed one shilling weekly, £5; and for each child or servant of a subscriber's family, the sum of £2, without any reference whatever to the amount of subscription.

"That no subscriber, or any member of his family, shall be entitled to any benefit or relief from the Association after such subscriber shall have made default in payment of his weekly subscription, unless he shall within two days after demand by the Collectors, or one of them, pay the same and all arrears then due.

"That whenever the resident medical practitioners of Southam shall certify to the Committee under their hands that they are of opinion the Association may be safely dissolved, the same shall, *ipso facto* cease, and the unappropriated funds then in the hands of the treasurer—subject to any existing liabilities of the Association—shall be returned to the subscribers, in proportion to the total sums respectively subscribed by them.

"That it be a strong recommendation from this Committee to the General Association, that in case this parish

shall in mercy escape altogether from this alarming scourge, one moiety of the funds unappropriated be devoted to some charitable purpose, as a thank-offering to Almighty God for his great and undeserved mercies to the inhabitants of this parish.

Similar rules to these were successfully tried in 1832. At that time, many fathers of families, seriously impressed with an awful sense of danger from the prevalence of cholera throughout the kingdom, and which they were told, might reduce many of the most excellent and industrious tradesmen, mechanics, and labourers, from comparative respectability and comfort to the greatest distress and poverty, agreed to unite in the spirit of brotherly love and christian regard for each other, and to combine their resources together, thereby hoping to remedy such of the consequences of the complaint as were within their power. At that time the cholera was introduced twice; once into the town, and once into a village, by a boatman's family, about two miles from us, and three persons lost their lives, though it never extended from the place to which it was brought. I attribute this checking of its course mainly to the public confidence the "Cholera Assurance Society" gave to the medical men, and in submitting to have those things done for them good naturedly and voluntarily, which I am sure they would have at least grumbled at if it had been done by Act of Parliament.

For instance, when a case of cholera was reported to us, I went with Mr. Gardner, (now of Brighton,) and we caused the door of the cottage (a barber and tripe-dresser's,) to be surrounded by hurdles, and gave strict orders to have no person, excepting the doctors and nurse, to visit the house. We also ordered a fire of shavings, &c., to be kept burning before the door, within the fence, for without entering into any question of its contagiousness, or mode of travelling, whether by steam or electricity, we thought it good sense to rarefy the atmosphere before the door, and so dilute and carry away anything offensive upwards. It succeeded, for though the patient died, there was no extension of the disease.

It may be encouraging to add, that by placing the money in the Savings' Bank, as it was paid in weekly, and by allowing the interest to accumulate, with the aid of a donation, we were enabled, some months afterwards, to restore to each of the subscribers the entire amount of his accumulated payments.

I have also sent you an address to the labourers, &c., which was eagerly purchased, and proceeding from a medical man who was known to them, I think had more influence over them than dry official papers from a remote Board of Health could be expected to have. I am afraid it is too long for insertion in your Journal, but something of the kind issued by the local friends of the people, would be more useful than anything likely to come from the great crowned image at Somerset House, whose little toe of iron and miry clay, at Southam, would trample on any man who should seek to improve the condition of the honestly independent labourer.

I remain, Sir, your humble servant,

H. L. SMITH.

Southam, Warwickshire, May 20, 1849.

NOTICE OF W. HENCHMAN CROWFOOT, ESQ., F.R.C.S., OF BECCLES.

[We are gratified to be able to comply with the wishes expressed by several members of the Association, for some notice of the late Mr. Crowfoot, of Beccles. The following is a brief but authentic sketch of the medical career of our lamented Associate.]

Mr. Crowfoot was born September 9th, 1780, at Kessingland, a village on the Suffolk coast, where his father occupied a large farm. He had the misfortune to lose his mother, the daughter of the Rev. J. Henchman, in his infancy, but at an early age he was placed under the charge of the Rev. W. Clubbe, Vicar of Brandeston, who was married to his mother's sister. Mr. Clubbe being an elegant Latin scholar, he there imbibed a strong taste for classical literature.

In 1794 he was apprenticed to his uncle, Mr. Crowfoot, of Beccles, who treated him with the affectionate kindness of a parent. In 1799 he removed to London, and entered as a pupil at the borough hospitals, under Mr. Cline and Mr. Cooper, the latter of whom ever entertained for him a high regard, which was proved by several marks of attention in after life. In Mr. Cooper's work on "Dislocations," he speaks of him as one "who, to high professional skill, adds all the amiable qualities which can become a man."

On leaving the hospital he hoped, by the assistance of Mr. Cooper, to obtain a medical appointment in India, but not succeeding in this, he eventually settled in Framlingham, a small town in Suffolk. Here he did not readily obtain so much practice as he desired, and at the suggestion of his uncle, Mr. Crowfoot, he removed in 1803 to Beccles.

In 1805 he became his uncle's partner, and his career was thenceforth marked by high professional credit and success. It was in the December of 1805 that he accidentally met a party bearing the body of a soldier, who had been thrown on the beach at Kessingland, and lain for several hours apparently dead. Finding that the præcordia still retained some warmth, he caused the body to be carried to a house, and persevering in the means of restoration which his professional skill suggested, he at length revived the sufferer. For this action the Royal Humane Society awarded him a silver medal at their next annual meeting.

When the new charter was conferred upon the College of Surgeons, the Council of that body honoured him by selecting him as one of the original 300 fellows.

Actively engaged in the pursuits of a very extensive practice, Mr. Crowfoot had but little time to devote to writing on medical subjects; but he occasionally published in the leading periodicals of the day, any remarkable results of his own experience. All his papers were characterized by strong sense and practical usefulness. He pointed out the connection between rheumatism and carditis before that connection was so much insisted upon as at present. He published an account of the successful employment of extension in a case of fractured spine, shewing the value and importance of that mode of treatment in cases which are too often regarded as

hopeless. He also published several papers on subjects connected with puerperal diseases.

The peculiar characteristic of Mr. Crowfoot as a medical practitioner was the accuracy of his diagnosis, he usually apprehended at once the distinguishing features of a disease. His treatment was simple. He ever aimed to attain the object he had in view by the most gentle remedies. Throughout life he was an ardent pathologist, and lost no opportunity of confirming or correcting his views of a case by a *post-mortem* examination, indeed his life fell a sacrifice to his zeal in the pursuit of pathology; for, in consequence of opening the body of a patient who died from a malignant form of typhus fever, he contracted the disease, and expired on the 13th of November, 1848, after an illness of only four days.

Few country practitioners have enjoyed so large a share of public confidence as Mr. Crowfoot. Though his professional ability was much above the average, this was even less esteemed than his high integrity, urbanity, and gentlemanly conduct. His medical brethren ever found comfort and aid in his judicious advice as a consulting surgeon, while his private patients experienced in his delicate, gentle, and soothing attention, that tenderness which relieves so effectually the bitter trials of anxiety, pain, and sorrow. Whether called to the cottage or the mansion, he was alike watchful, and earnestly anxious to relieve. High and low, rich and poor, will long regret in his death the loss of one who was in an unusual measure their common benefactor and friend.

Medical Intelligence.

TESTIMONIAL TO DR. PARIS AND MR. FONBLANQUE.

A service of plate and one hundred guineas have been awarded by the Council of the Society of Arts to Dr. Paris, President of the Royal College of Physicians, and to Mr. Fonblanque, for their joint work on Medical Jurisprudence.

APPOINTMENTS.

William Heane, Esq., has been appointed Surgeon to the Suffolk General Hospital, by purchase, in accordance, as it appears, with the rules of the Hospital.

Farquhar Milne, Esq., has been elected one of the Surgeons to the Chorlton-upon-Medlock Dispensary, Manchester.

Daniel Blair, Esq., M.D., has been appointed Surgeon-General for the colony of British Guinea.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates Thursday, January 18th:—William Griffiths, Standish, Lancashire; Thos. William Houchen, Werchem Hall, Norfolk.

Gentlemen admitted Licentiates Thursday, January 25th:—John Wilson; William Murthwaite Thompson, Lambeth.

OBITUARY.

Died, January 16th, at Worthing, aged 71, Jacob William Robins, Esq., M.R.C.S.

January 19, at Dorking, aged 82, Isaac Chaldecott, Esq., formerly Surgeon to the Garrison of Portsmouth.

January 23rd, at Hastings, aged 46, Henry Colebourn, Esq., M.D., of Stockwell Villas, Clapham:

January 24th, at Aberdeen, of fever, aged 33, William Mackinnon, M.D., Fellow of the Royal College of Physicians of Edinburgh.

January 31st, at Grange Terrace, Brompton, aged 33, Dr. George Fownes, F.R.S., Professor of Practical Chemistry at University College, London.

Lately, at Riggsville, of fever, Dr. Cornwall, Superintendent of the Killucan Dispensary.

BOOKS RECEIVED.

Surgical Anatomy. By Joseph Maclise, Surgeon. Fasc. I. London: Churchill. Folio. Plates.

Pathology of the Human Eye. By John Dalrymple, F.R.C.S. Fasc. I. London: Churchill. 1849. 4to. Plates.

An Essay on some of the Most Important Diseases of Women, &c. By W. Jones, M.D., Physician to the Free Hospital for Women and Children, &c. London: Bailliere. 1848. pp. 41.

The Examination of a Rejected Candidate at the Royal College of Physicians of London, December 21st, 1848. By Edwards Crisp, M.D., M.R.C.S. L.A.C., &c. London: Churchill. 1849. 8vo. pp. 62.

Medical Portraits:—Dr. Forbes; Dr. G. Budd.

The London and Provincial Medical Directory—1849. London: Churchill. pp. 532.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

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ROBERT J. N. STREETEN,
Secretary.

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PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON SURGERY,

DELIVERED IN THE

MEDICAL SCHOOL OF CAMBRIDGE.

By GEORGE MURRAY HUMPHRY, Esq., Downing College, Surgeon to Addenbrooke's Hospital.

LECTURE III.

General Symptoms of Inflammation, analogous to Local; Changes in Blood; Cause of Buffed Appearance, and its Value as a Symptom; small Size and Firmness of Clot:—Other Changes in Blood; their Relation to the Fever; Resemblance of Inflammatory Blood to that of Pregnant Females; the preliminary general Depression, resulting probably from corresponding Condition of Part about to be inflamed:—Treatment of Inflammation; Bleeding; quality of Pulse indicating need of Bleeding; consequent Reaction; Period at which Bleeding should be adopted; Local Depletion near the inflamed Part, but not from the inflamed Skin:—Mercury and Opium, Indications for and against their Use.

The presence of local inflammation, especially if it be severe, extensive, or situated in an important organ, is soon followed by a train of constitutional symptoms analogous to those occurring in the inflamed part, and seeming to result from an extension of the inflammatory disturbance to the system, much in the same manner as it spreads from point to point, at the immediate seat of the disorder. The increased activity of the vessels has its analogue in the general excitement of the vascular system,—in the rapid and forcible action of the heart,—in the full, hard, and bounding pulse. The concomitant headache, soreness, or even tenderness of the whole body, the restlessness and irritability, show a disturbance of the nervous system, corresponding with the local pain. The sense of weakness and inability to make any exertion, the hot dry skin, the loaded tongue, the thirst, costive bowels, the scanty urine loaded with lithates, together with the alteration and diminution of the other excretions and secretions, are additional evidences of a disordered state of the constitution, bearing much resemblance to the local disease. The comparison derives still further force from an examination of the changes which are found to have taken place in the blood circulating through the body. These are of sufficient importance to require our careful attention, inasmuch as the question of the existence of inflammation, and the proper treatment to be pursued, are often determined

by the appearance of the blood drawn from the body, when the other indications would have left us doubtful of the real nature of the malady.

In blood drawn from a healthy person, the red globules are observed in two or three minutes to collect into heaps or rolls, with their flat surfaces approximated like coins laid upon one another, at the same time the blood becomes a little stiff, or set, from the commencing coagulation of the fibrin, so that it forms a loose sponge-like structure, entangling the little masses of globules and the serum in its substance. The globules are distributed almost equally throughout this soft jelly-like substance, giving it an uniform red colour; it occupies about the same space as the fluid blood had done before coagulation commenced, and adheres to the sides of the vessel into which it was drawn. During the further coagulation or contraction of the fibrin its particles approach more closely to one another, and squeeze out the serum from between them without displacing the globules, so that in a short time the contracted fibrin and red globules forming the clot are found separated from the sides of the vessel, and floating in the serum expressed from them.

The red globules are comparatively heavier than the fibrin, and would sink to the bottom of the clot if their descent were not arrested by the coagulation of the fibrin. This actually does occur if by any means their relative weight is increased, or the coagulation of the blood is delayed beyond its usual time, both which effects are produced by inflammation; for, in the first place, the red globules of inflamed blood adhere together so quickly, that they are found to have clustered into little masses before the blood can be placed under the microscope, and, as a necessary consequence, they fall through the blood more quickly than in the healthy state; and, secondly, the specific gravity of the fibrin is diminished, and its coagulation takes place more slowly than under ordinary circumstances. Owing to the combined influence of these changes in the qualities of the blood, the red globules subside towards the bottom of the clot, leaving the upper part of a lightish brown or buff colour. The coagulation and contraction of the fibrin continuing takes place most completely where it is least impeded by the presence of red globules, so that the upper part of the clot is reduced to a smaller size than the rest of its substance, and from the same cause becomes cupped on its surface, and puckered at its edge. The blood is now said to be buffed and cupped.

That the slowness of coagulation is an important

element in the formation of the buffy coat is proved by the appearance of the coagula found in the heart and great vessels after death. The setting of the blood, when the circulation has ceased, takes place slowly, in consequence of its being still subject to the vital properties of the tissues which remain for a time after the general death of the body; the red particles subside, and the upper part of the clot, that, for instance, which occupies the right auricle of the heart, is generally found to be composed of buff-coloured fibrin, with a small quantity of serum included in its reticular substance. Other causes also which retard the coagulation of the blood may give rise to the formation of the buffy-coat, and it occurs naturally in the blood of some animals,—as the horse.

But that the buffing and cupping of the blood in inflammation do not depend merely upon the slow coagulation of the fibrin, is also proved by their being occasionally observed in blood which has coagulated quickly, and they are sometimes absent when coagulation has been delayed thirty or forty minutes after its withdrawal from the body. In those particular cases, in which coagulation occurs very imperfectly, or not at all, after death, the subsidence of the red particles does not appear to take place, and the blood presents a uniform red colour. (I merely mention these varieties, without attempting to explain them.) The buffing and cupping of inflammatory blood are dependent, no doubt, on that alteration in the properties of the red particles which accelerates their coalescence, in addition to those other changes in the blood which increase their relative specific gravity, and modify the rapidity and force of the contraction of the fibrin.

There is also another cause, occasionally giving rise to a buffy appearance of the upper part of a clot which must be taken into consideration in estimating the value of this symptom. I refer to the presence of an unusual quantity of white corpuscles. When the constitutional symptoms of inflammation have arisen, these bodies are found circulating in large quantities through the body, just as a greater number of them were observed in the inflamed part. They are of lower specific gravity than the rest of the blood, so that while the red corpuscles sink to the bottom, they rise to the top, of the clot, and are found in greatest numbers in the buffy stratum. They do not, at this part, exist in such great numbers as do the red corpuscles at the lower part of the clot, or they would in the same manner interfere with the contraction of the fibrin, and prevent the cupping. Under certain circumstances, when the formation of blood is going on quickly, as after a full meal, or in consequence of an unusual call upon the nutritive functions during pregnancy, the healing of a large wound, after loss of blood, and so on, these white corpuscles are present in great abundance, and if blood be drawn at such time, they may rise to the top, and form a buffy coat. It happens that their disposition to do so is, in some of these conditions, favoured by the coagulation of the blood being a little slower than usual. Unless aware of this fact, you might occasionally be led into error by too implicit reliance on the buffy coat as an indication of the

presence of active inflammation. It is well also to bear in mind, that although the buffy coat observed on the first bleeding may result from the presence of inflammation, the same symptom may, on subsequent occasions, depend upon the increased number of white corpuscles taking place to make amends for the former loss of blood.

Happily there is another distinguishing feature of inflammatory blood which is even more characteristic, and certainly is of more practical value, than the buffy coat. I mean the increased contractile force of the fibrin which occasions the clot to be small and tough, not easily penetrated by the finger, and gives rise to the formation of the cupped condition of the surface, for, I should say that the buffy coagula occurring under the circumstances just mentioned are very rarely cupped. This increase of contractile force is generally proportionate to the slowness of the coagulation, and is most marked in vigorous persons, and in acute attacks of inflammation. The small tough clot is a more important sign than any other condition of the blood in the treatment of inflammatory fever; it marks the severity of the disease and the powers of the patient—the necessity for active treatment and ability of the patient to endure it.

The inflammatory blood presents the appearances just described, more or less distinctly, according to the degree in which the blood has undergone the changes which occasion them. In some cases there is a complete subsidence of red particles from the upper part of the clot, which is small, firm, deeply cupped, and puckered on the surface. Such well-marked characteristics in the clot generally accompany severe fever in a vigorous constitution, associated with inflammation of a serous or fibrous membrane. In other cases the coagulum is larger and less firm, the buffy coat is thin and easily broken, the subsidence of the red globules and the contraction of the fibrin are less marked, and the accompanying inflammation is less violent, or may be seated in a mucous membrane.

The coagulation of the blood, though a vital process constituting the first stage of organization, and resulting from the inherent tendency of its particles to unite together and form a tissue, is, in the living body restrained by some higher counteracting influence, which suffers it to take place only in subservience to the nutrition of the tissues. Except in the case of inflammation, when the independent powers of the blood seem to be greatly increased, and in extravasations of blood, coagulation does not occur till this restraining influence is removed by the death of the body or the abstraction of the blood from it. When coagulation does take place, it will do so in greatest perfection, and most slowly, where its vital energies are best preserved, as in the body after death, or when it flows from the living body in a full stream and is at once received into a deep vessel. By taking such precautions we give the most favourable opportunity for the manifestation of the characteristics of inflammatory blood, we remove it from the controlling influence of the tissues without diminishing in any great degree its own vitality, so that it is freed from restraint and exhibits

the changes which it has a tendency to undergo. If, on the other hand, its vitality be much lowered, by exposure to the air, as when it falls from a considerable height in a small stream, by its reception in a flat or very cold dish, or in other ways, coagulation is rapid and imperfect, and the buffy coat is less likely to be observed. A still further reduction of its vitality will prevent the coagulation altogether. Examples of this are furnished by cases of death from lightning or severe injuries to the nervous centres, when the vitality of the whole body, its fluid as well as its solid components, appears to be instantaneously destroyed.

Further important changes in the general mass of the blood corresponding with those observed at the seat of the inflammation, are the increase in the quantity of the fibrin and the diminution of the red globules.

These are found by M. Andral to be proportionate to one another and to the activity of the local disease rather than to the severity of the febrile disturbance. Indeed the experiments of that physician serve to shew that in common fever the amount of fibrin is diminished, the number of red particles undergoing no material alteration; and that any increase in the fibrin during fever is almost always referable to the development of some local inflammation. He, accordingly, attributes the increase of the fibrin in inflammatory fever to the changes taking place in the inflamed part; and the coincidence observable between the increase and diminution of the febrile symptoms, and the increase and diminution of the fibrin, he refers to the dependance of the fever and the changes in the blood on the same cause, viz., the extent and intensity of the local disease.

The several changes observable in blood drawn from the system during inflammatory fever, the diminished quantity of red, and the increase of white globules, the corresponding increase of fibrin, with its altered qualities, inducing slow coagulation with a firm clot buffed and cupped, together with the disposition of the red globules to adhere quickly into rolls and masses, correspond precisely with the condition of the blood at the inflamed part, and seem to originate there. Probably the altered fluid circulating thence contaminates the remainder of the blood, spreading over the system the flame that had been communicated to it at the seat of the disease.

Whether the inflammatory fever depends upon this morbid condition of the blood circulating through the system it is not easy to decide. The observation of M. Andral, that the changes in the blood correspond with the local disease rather than with the fever, and that they do not accompany the latter unless some local inflammation exists, do not favour such a supposition. It is, perhaps, more probable that the extension of the inflammatory condition from point to point, and from a part to the whole system, depends upon certain properties in the disease of an assimilative nature, aided by that particular relation between the several parts of the system which we call sympathetic, that interweaving of function and universal harmony of its several members, which does not permit one part of the body to suffer without detriment to the whole.

I have already alluded to the fact that the buffy condition of the clot and the increase of the white globules are often observed in the blood of the pregnant female. M. Andral finds that the amount of fibrin is also increased and that the red globules are deficient in the later periods of pregnancy. This correspondence in the condition of the blood at the time when nature is putting forth her best energies to furnish material for the development and growth of another being, with the changes which it undergoes in inflammation, is an interesting feature in the physiology of both processes, and is thought by M. Andral to have some relation to the occurrence of those special accidents, mostly of an inflammatory nature, which so frequently affect females recently delivered.

The excitement of inflammatory fever is almost always preceded by symptoms of constitutional depression. The feeble pulse, chilly sensation, cold extremities, loss of appetite, pain in the loins, general languor and feebleness, indicating a depressed condition of the circulatory and nervous systems, are the usual precursors of the febrile symptoms which seem to follow as a reaction from them. This general depression, the earliest in the train of symptoms, is a very important one, warning us of the forthcoming mischief, which is, for the most part, proportionate to it in severity. A sudden and violent rigor, with pale ghastly countenance, sunken eyes, feeble rapid pulse, cold clammy skin, and sense of sinking are fearful symptoms to witness, and they portend serious evils. The patient may die outright, the great organs being unable to stand against this depression of their vital powers; or he may linger on for some days, unable to rally, and may sink at last under its influence. Commonly it is the forerunner of a violent inflammatory attack, which quickly follows. The less severe inflammatory affections are preceded by symptoms of a similar kind, but less alarming; the patient feels unwell, chilly and languid, he cannot get warm and is unfit for work for a day or two before the manifestation of the disease, of which this condition is the forerunner. So constant is this preliminary train of symptoms in one form or other, and so nearly proportionate is it to the ensuing illness, that when summoned to a patient at the commencement of an inflammatory attack, we may often form a tolerably correct estimate of the probable severity and duration of the disorder by the preceding chill; and we are often relieved from the apprehension excited by a febrile attack, when we discover that it had not been preceded by sufficient evidence of constitutional depression to have attracted the patient's notice.

In forming an estimate of the value of this symptom, we must not forget the very different degrees in which the nervous systems of different individuals are wont to respond to impressions made upon them. The highly sensitive nervous system will give great warnings of small approaching evils; it quickly sounds the alarm, and a violent rigor, with chattering teeth and sinking pulse, are sometimes the heralds of a mere bilious attack. In the well-poised constitution only is the preliminary depression to be regarded as a fair criterion of the illness which is to follow.

In ordinary cases of spontaneous inflammation, we are not cognizant of any local change corresponding to this general suffering, and during the continuance of this preliminary stage, we often cannot tell what organ is to be the seat of the inflammation. So that we might imagine the constitutional depression to be the prime mover of the disorder, and the local inflammation to be the consequence of it. Such may sometimes be the order of events. More commonly, however, it seems probable that the general prostration is the result of an impression originating in some particular part. Thus, wet feet, or an exposure of some part of the body to a draught, occasion a general feeling of chilliness, which is followed by inflammation in an organ, distant, it may be, from the one where the first impulse to the disorder was given. In case of accident or operation, the constitutional depression or shock, is clearly the result of some particular condition of the injured part communicated to the system. It corresponds in its severity to the extent of the local lesion, and the importance of the injured organ, and gradually gives way to the symptoms of reaction, which, perhaps, pass on into inflammatory fever. Frequently the general depression remains for a short time after the manifestation of the local disease, which then shows itself to be in advance of the constitutional disorder. It is probable that the usual order of sequence of the events of inflammation with fever, are, first, some particular condition of the organ about to be inflamed, corresponding with, and standing in the relation of cause to, the constitutional depression which is the second event in the attack; thirdly, the symptoms of local inflammation are developed, ensuing as a reaction upon the depressed condition of the organ; and, fourthly, the inflammatory fever, which is the reaction from the general depression, increased and modified by the direct effects of the local inflammatory action, and the sympathetic relations of the body in the manner just mentioned. The effects of frost-bite upon a limb, and through it upon the system, are no bad illustration of these remarks, the stage of local depression being here more appreciable than under ordinary circumstances, and the subsequent inflammation, following more clearly as a reaction from it, is seen to be proportionate to it in the severity of its effects.

In what manner the local and general reaction depend upon the local and general depression I cannot tell, though there is very little doubt that they do so. The well-known fact that the latter may be prevented by cutting short the former is sufficient evidence of this. The treatment of ague is conducted upon this principle, the arrest or prevention of the preliminary shiver by warm drinks, or the application of external warmth, being the sure means of curtailing or warding off the subsequent stages of the fit.

As a general rule, the attendant constitutional symptoms bear a certain relation to the extent and severity of the local disease, but they are not always a measure of its danger. They are strongly marked in acute rheumatism, which, so long as it is confined to the joints, is free from danger. They are in greater force when associated with inflammation of serous and

fibrous, than of mucous membranes, and the parenchyma of organs. They are, besides, often modified by the altered function of the organ affected. Thus, in inflammation of the heart or brain, the general fever does not always correspond with the amount of local disturbance, owing to the direct impairment of the great circulatory organ in the one case, and the nervous centre of the other. Or, they may be modified by peculiarity of the patient's constitution or by some previous indisposition, and want of vigour of one or more of the great organs, rendering them unable to respond to the stimulus of the local ailment in the same manner as the others. Peculiarities of this kind, intermitting pulse, convulsions, &c., showing a want of order and of due proportion between the symptoms of inflammatory fever, furnish cause for alarm in no less degree than a more severe train of symptoms, in which the several parts of the body evince a greater equality of enduring power.

In the treatment of acute inflammation with inflammatory fever, we have to deal with a local disease and constitutional disturbance, acting and re-acting on each other, and our efforts are first directed to quell the latter as the most effectual means of checking the former. By far the most powerful remedy at our command is blood-letting, which is, perhaps, of more avail in arresting the disease than all our other resources combined. As a general rule, so long as the inflammation is confined to a part, we are content with the local abstraction of blood by leeches or cupping; but when it has extended to the system, and fever is superadded, it is necessary to resort to venesection. Of the need of this treatment, and the extent to which it should be carried, we form our opinion from a knowledge of the constitution of the patient, the severity of the disease, and the importance as well as the nature of the organ affected. In a case of acute pleurisy or inflammation of the lung, with inflammatory fever, in a strong and robust person, the free use of the lancet is strongly called for. The disease is violent, the organ of vital importance, and the patient strong. A large quantity of blood may be drawn; the relief afforded is often immediate and very decided. The blood coagulates into a small clot, which is tough, buffed, and cupped. When the inflammation is seated in the lining membrane of the lungs, the inflammatory fever is generally less intense; blood-letting must be cautiously employed, for symptoms of prostration are likely to follow, the relief afforded is less decided, and the coagulum of the blood is larger, softer, less buffed and cupped.

It is usually advisable to allow the blood to flow till a decided impression has been produced upon the system, and the indications of approaching faintness, such as acceleration of the pulse, paleness of the face, and the appearance of moisture on the lips and forehead, are the intimations that sufficient impression has been made. Place the patient in a sitting posture, that you may have early warning of the approach of faintness, and close the vein as soon as the symptoms just mentioned show themselves, for the faintness often

increases after the blood has ceased to flow. The quantity of blood which it is desirable to abstract, is such as the patient will bear to lose without fainting, and is often a measure of the severity of the disease, and the necessity of the treatment.

The pulse is the most unerring indication of the existence of that degree of inflammatory fever which requires general bleeding; and the quality of the pulse on which we chiefly rely in deciding this point, is its hardness. You are aware that the pulse is caused by the alternate distension and contraction of the arterial tube, as the wave of blood is driven through it by the force of the left ventricle of the heart. There are, therefore, three elements concerned in its production, each of which impresses its peculiar value upon it as a symptom; these are, the quantity of the blood, the action of the heart, and, thirdly, the tension of the arterial tube. Upon variations in the first of these depend the fulness or emptiness, the plethoric or anæmic condition of the pulse. By the excitement or depression, and other variations, of the second, is caused the rapidity or slowness of the pulse, its regularity and rhythm, or the reverse, while the strength of the heart's action gives it force. Lastly, the soft or hard feel of the pulse varies with the degree of tension of the arterial tube. When this is slight, the dilating artery accommodates itself easily and gently to the advancing wave, and when that has passed, it gradually resumes its former state, whereas a tense rigid condition of the artery gives to the pulse a hard unyielding feel, and renders its vibrations scarcely perceptible to the finger. Under such circumstances, also, a large amount of blood may be drawn before it is missed from the arterial system; in other words, the quantity of blood may be greatly reduced before it will cease to distend the tightly-contracted arterial tubes, or before they will become relaxed, and faintness be perceived.

Faintness is associated with a condition of the pulse directly the opposite of that we have been just considering. It imports an imperfect distension and relaxed condition of vessels, and that the cerebral substance does not receive its proper amount of pressure from the blood contained in them. The faintness produced by venesection in inflammatory fever is an evidence, therefore, that the arterial system is sufficiently relieved, and the earliest indications of its approach should warn us to close the vein, because, as the faintness proceeds, the vessels become more and more relaxed, and the heart's action enfeebled, in consequence of the diminution of the nervous influence by which the excited action of both was maintained. A forcible action of the heart always, and a frequent action generally, accompanies the hard pulse.

After venesection to approaching syncope, the more urgent symptoms of inflammatory fever are generally relieved; the patient, hitherto restless and in pain, falls asleep, the secretions are restored, the skin becomes soft and moist, the urine is more copious, the action of the bowels is easily induced, and the disease, perhaps, is effectually arrested. It is necessary, however, to be aware of the reaction which is likely to follow the depression caused by loss of blood; this reaction is more or less

proportionate to the preceding depression, and is an additional reason for not carrying the depletion beyond the amount required to control the excited condition of the circulatory system. It may often be lessened or prevented by the adoption of antiphlogistic treatment after the bleeding, and the timely abstraction of a small quantity of blood from the inflamed part when it is commencing. It is well to bear in mind that the reaction, dependent in part upon the preceding depression, is not to be regarded and treated as a relapse of the inflammatory fever. General bleeding should not be again resorted to, unless decided hardness be added to the quickened state of the pulse. The reactionary exacerbation of symptoms usually subsides again in a few hours, or yields to milder measures, and the benefit of the first bleeding is then more completely apparent.

Much has been written about the period of an inflammatory attack at which bleeding is most beneficial, and the comparative advantages of early bleeding. I think the common sense view, that so decided a measure, attended, as it unquestionably is, with some danger to the patient, should not be resorted to till symptoms have arisen which require its employment, will generally prove to be correct. The practice of bleeding to *prevent inflammation*,—that is to say of bleeding persons who have been exposed to the exciting causes of inflammation, such as severe injuries, operations, &c., must, on the whole, be injurious, though there may be exceptional cases rendering such treatment advisable. Bleeding before operations, except where inflammation already exists, as in some cases of strangulated hernia, and other treatment which lowers the vital powers of the patient, only renders him more amenable to the shock of the operation, and the inflammatory reaction which is likely to follow. Patients who are in the weakest state, or who have lost the most blood during operations, are the least likely to recover; in them we have most reason to apprehend the occurrence of those dangerous inflammations in different parts of the body, followed by suppuration or "purulent deposits," as they are sometimes called.

During the preliminary stage of depression, depletion is, of course, out of the question; but when the symptoms of inflammatory fever have fairly commenced, and the pulse has become hard, it is absurd to wait for their further development. By the timely abstraction of blood when the symptoms of inflammation are setting in, we may often cut short the disease, and at once relieve the patient. The advantage of decided measures at this particular period of the attack, you have lately seen exemplified in two cases of commencing inflammation of the brain, consequent on injury of the head, in both of which the symptoms were at once arrested in an early stage by moderate bleeding, followed by antiphlogistic regimen, and did not again return.

A few years ago, no doubt, a vast amount of evil was done by the extravagant use of the lancet; but lately, as a natural consequence of excess in its employment, the tide of opinion has set so strongly against this weapon, that I think disease gains some advantage from the timidity of modern practitioners in

resorting to it. The right time for bleeding is often allowed to pass, and the inflammation, unchecked by milder measures, runs on to a stage when its destructive effects are rather aggravated by depletion, which, employed at an earlier period, might have prevented their occurrence.

In addition to the diminution and dilution of the general mass of the blood caused by bleeding, the red particles are disproportionately decreased, and the quantity of fibrin is also diminished, secondarily, and in less degree. It is probable that the good effects resulting from depletion in inflammation are due, not so much to a change in the relative proportions of the constituents of the blood, as to a direct effect in reducing the force of the disease by withdrawing the pabulum of the process, the fuel with which the flame is fed, and to the lowering of those vital energies of the blood and of the patient, in the exaltation and aberration of which the morbid phenomena consist.

When the accompanying fever is slight or has been checked by general depletion, the abstraction of blood by leeches and cupping from the neighbourhood of the inflamed part, is a very effectual means of combating the local disease. Leeches are suited to the greater number of the cases which fall under the care of the surgeon, because they are attended with less violence than cupping. The pain and inconvenience connected with the employment of cupping-glasses and the scarificator, often do more harm to an inflamed and tender part, (the knee-joint for instance,) than the loss of blood does good. In the case of inflamed hip, the joint being more deeply seated, this objection does not apply; and the sudden abstraction of a few ounces of blood from behind the great trochanter is, on the whole, more serviceable in an acute inflammation of this joint, than the gradual loss of the same quantity by leeches.

No doubt one of the advantages of leeches, rendering them especially suited to relieve chronic inflammatory affections, is the slow manner in which the blood is withdrawn, producing a gradual effect upon the inflamed part, and followed, therefore, by less reaction. For the same reason the bleeding from the leech-bites should be encouraged by the application of warm moist flannels, which is, perhaps, the method of fomentation least fatiguing to the patient, and it is sometimes desirable to maintain a continuous oozing by a relay of leeches, when the bleeding caused by the first batch begins to cease.

Whether leeches or cupping be employed, there is no doubt that the benefit is most apparent when the blood is drawn from the integuments covering the inflamed part. Some sympathetic connection probably exists between the skin and the organ situated beneath it, whereby the impression made upon the one is communicated to the other. But it is not generally advisable either to cup or apply leeches to the inflamed part itself; the irritation occasioned by leech-bites in inflamed skin generally increases the disorder, and may give rise to troublesome sores, or even to mortification. Inflammation of subcutaneous absorbent glands, in which the skin is implicated, is commonly aggravated

by the application of leeches, unless they be placed in the circumference of the inflamed part; and in epididymitis, accompanied as it often is by considerable inflammation of the integuments of the scrotum, the good effects of leeches are most fully obtained by placing them over the cord where it is rising to enter the abdominal ring. I believe also that in inflammation of the os uteri more benefit is derived from the leeches applied to the integuments about the anus than to the organ itself. In chronic inflammation of the absorbent glands and epididymis, where the integuments are but little or not at all involved, the leeches should be applied immediately over the part affected. In inflammation of the eye they should be placed upon the temple, and not, under any ordinary circumstances, upon the tender skin of the eyelids.

The number of leeches should be proportionate to the severity of the disease. In acute inflammation of the knee, one or two dozen are required to arrest the attack, if possible, by a sudden and decided impression. In a chronic inflammation of the lobules of the breast, or of the epididymis, with induration, the purpose will be best attained by a less decided but more continuous or repeated impression, and the application of two or three leeches every three or four days, is, in such cases, most beneficial.

The good effects of mercury are most apparent in the inflammations of vigorous persons, and in those more particularly which are attended with the formation of new products, causing induration of textures, and adhesions of parts which ought to be free, such as inflammations of serous membranes and the iris; whereas, in inflammations of a low type, in those which are combined with symptoms of typhoid character, in old people, and in persons of delicate, irritable, nervous constitution, in inflammations of mucous membranes, and in other cases where the effects of the inflammation are displayed in destroying the tissues, and in promoting ulceration and mortification, rather than by effusions of lymph, the administration of mercury to such an extent as to produce its peculiar influence on the constitution is likely to be injurious. You will seldom err in following the rule of giving mercury to persons of strong constitution, when the inflammation is seated in a texture where we know it is likely to be followed by effusions of lymph, and of withholding or exhibiting it very cautiously in weak and old people, or whenever ulceration and mortification are likely to ensue.

The effects of mercury are influenced to a certain degree by the character of the inflammation, thus certain of the syphilitic affections, though attended with ulceration, are benefitted by mercury; but whatever may be the character of the inflammation, provided it be seated in a texture where effusions of lymph are likely to take place, the use of the mineral is almost always indicated. This is peculiarly true of iritis, which, whether owing to syphilis, gout, or any other cause, yields to the influence of mercury more surely than to any other plan of treatment.

An irritable and excited condition of the nerves of the part affected, and of the nervous system, constitutes

one of the features of inflammation, so that we naturally look for benefit from medicines which are known to exert a sedative influence. Opium has long been much used in the treatment of inflammation, and confidence in it as an auxiliary to other measures, is felt by surgeons of the present day, perhaps, to a greater extent than by their predecessors. It is well combined with mercury, assisting that medicine, and at the same time producing its own effect. It is a most serviceable adjunct to venesection, quieting the nervous system when the circulatory forces have been reduced by bleeding, and controlling the reaction which is likely to follow after the loss of blood. It is especially indicated when the symptoms of irritability and restlessness predominate, and in delicate asthenic persons, where blood-letting and other active treatment are forbidden. It is further indicated when the part affected, from its particular position or function, is kept in continual action by the irritation caused by inflammation. Thus a dose of opium allays the frequent and urgent desire to void the urine which accompanies inflammation of the bladder, and which necessarily aggravates the disorder.

The administration of opium is often attended with much relief when inflammation is passing on to ulceration and mortification, in cases of phagedenic ulceration of the throat in debilitated persons, and in senile gangrene, and in a great number of painful inflammatory affections, attended with restlessness and want of sleep.

I will here make three remarks by way of caution to you in the administration of opium. 1st. Beware of giving it when the sensibilities of the nervous centres are beginning to fail, in consequence of imperfect aeration of the blood, congestion of the brain, or other cause; under such circumstances, it will be most likely to hasten the patient's death. 2ndly. You should not forget that it is a most alluring medicine to the patient, who, having learnt its agreeable, sedative, and comforting influence under your direction, will have great difficulty in resisting the temptation to continue it. A great number of confirmed opium-eaters have contracted the habit in consequence of the drug having been prescribed to them as a remedy for the cure of some disease. And, 3rdly, the sensibilities of the patient seem to be increased, and his ability to endure pain lessened, by its employment. I have been struck by this effect of opium in several cases which have fallen under my notice, and it has made me unwilling to commence its use unless there be some clear prospect of curative influence on the disease. The sufferings of a patient with stone are, I believe, in the long run, aggravated by it, and in malignant diseases we resort to it as the least of two evils, conscious that we can continue to procure relief from pain only by progressively increasing the dose.

THE

CONTAGION OF ASIATIC CHOLERA.*

By E. O. SPOONER, Esq., Blandford.

I have already alluded to the variola ovina, as offering an example of the progress of a disease notoriously contagious, and presenting analogies which it will be desirable to examine, in elucidation of the cholera importation. Flocks of sheep do not migrate and commingle to the same extent as human beings; contagions, therefore, do not spread among neighbouring flocks with the same rapidity as cholera marches from town to town. An Act of Parliament was passed last session, 11 and 12 Vict., cap. 105 and 107, for prohibiting the further importation of cattle affected with this disease. Inspectors of foreign cattle have been appointed at our chief ports, and these animals are now subject to quarantine. The diseased sheep are required to be "seized and destroyed," with any pens, hurdles, litter, hay, straw, or other articles likely to have been infected." In 1837, Mr. Youatt, an able writer on the diseases of cattle, declared that no such disease was known in England, and he described it on the authority of the French veterinary professors, by whom it was called "*Clavelée*." It had been noticed by them as early as 1747. The free importation of sheep under the new tariff brought it into this island; *a restricted commerce kept it out of this country for a hundred years*, during which time it had manifested itself pretty generally on the continent of Europe, and had often thinned the flocks of France. For a long time in the Hamburg market a separate place had been appointed for the contaminated sheep. Inoculation of the sheep has been employed in France very successfully, with an average mortality of one in four hundred. *No foreign sheep are now to be introduced without a warrant from a veterinary surgeon.* Had such precautions been observed on the first adoption of free importations, many of our agriculturists would have been preserved from immense losses which they have already sustained from this contagious epizootic. The disease, however, is now introduced *into many of the counties of England*, and it spreads into places where *communication cannot be fully traced, the atmosphere appearing to be the vehicle of infection.* It has been well observed, that if the quarantine laws are to be abolished, let the experiment be tried *in corpore vili*: we have it seems reversed the experiment. Crews sick with the cholera have been allowed free pratique, while the most stringent measures have passed the legislature to enforce quarantine on diseased cattle! We do not find our non-contagionist doctors have tried their hands upon this epizootic, or, perhaps, we should hear that contagion was an exploded doctrine, only fit for the dark ages,—that the pestilence came on the

wings of the wind, and crossed the Channel, nobody knew how,—that although it was never known in England till the new tariff, it was entirely owing to a neglect of sanitary regulations in our sheep-folds! Very learned discussions, no doubt, would clearly prove, that though it might have been first noticed in vessels arriving in our ports from abroad, it was entirely to be attributed to its particular “*penchant* for the mouths of rivers;” that it had a peculiar knack of jumping over one place and settling in another; and that after a few cases had occurred in a British port, it was quite useless to keep up quarantine regulations, which had been found ineffective on the Continent! Now, the absurdity of these positions are patent to every understanding, when applied to the variola ovina. If the cholera be a contagious disease, which every day’s experience gives us more and more reason to believe, the fallacies of our Board of Health and our Sanitary Commissioners must strike the common sense of the community. *The removal of all quarantine within a few days after the first cases of cholera had occurred at Hull was soon succeeded by numerous cases in the ports of Leith and London.*

If it be objected that inferences drawn from epizootic diseases are less decisive than those derived from epidemics, let us examine the records of the small-pox in man. In the metropolis we have already alluded to the evidence of Dr. Gregory, but in places of less population we can easily track its steps. About four months ago, a case of small-pox, which had been treated in St. George’s Hospital, was sent, after recovery, into the country. It had been a severe case of the confluent form, but the whole surface of the body had been covered, and a new skin had been formed. The young patient had been convalescent a fortnight; his clothes were supposed to have been purified, and the physician who attended assured him that it was quite safe for him to return to his family in the country. No case of small-pox had occurred in the parish of Spetisbury for fifteen years. Within a week after his arrival his elder brother sickened of the small-pox; it was severe and confluent, but he recovered. His younger brother took the disease a fortnight afterwards; it was distinct and mild. All three had been previously vaccinated. By strict measures of quarantine, and by vaccinating the children of the village, and re-vaccinating the adults who lived near, we succeeded in arresting the disease. Had these been cases of cholera instead of small-pox, it might, perhaps, have been denied that the St. George’s case produced the other two cases; it might have been said separation of the sick for six weeks, which we adopted for the rest of the community, was an unnecessary measure, and that the disease being very capricious, died out of its own accord.

Now, I have a very strong objection to the use of such an unphilosophical word as “*capricious*,”

as belonging to any disease. It is always in the mouths of the non-contagionists, because they cannot account for many of the phenomena of cholera without supposing the malady capricious, as if the poison of contagions followed any other than natural and regular laws. The caprice only exists in the understanding of those who use the term. The pathological laws of cholera are as definite as those of the Medes and Persians. It is sometimes called, too, a “mysterious disease,” and we confess that it must be a very great mystery to all those who deny the existence of contagion. But, the mystery to me is, that after so much has been written, and so much observed, people should yet imagine there is any mystery at all about it. Why, if the cholera is a mystery, the plague is a mystery, the small-pox a mystery. We shall never know under what peculiar organic or inorganic conditions the poison of small-pox originated, though mankind have studied it for the last eight hundred years, but we know some of its laws which are of great utility in preserving us from its ravages, and the most important laws upon which all our prophylactic powers have been based are its laws of contagion.

The malignant scarlet fever in all probability was the plague of Athens, described by Thucydides. The records of early pestilences are, however, very meagre and imperfect. The small-pox and measles were no doubt much more formidable in the invasions of new countries, as modern history has taught us. The American Indian tribes have sometimes perished by thousands, when the epidemics of civilized nations have introduced among them the contagious poison of various diseases of the civilized world. “Yet, (says Dr. Odier,) at some periods small-pox and plague carry off hundreds: at others, children whom we inoculated, have gone out every day, even after the eruption had broken out;—they have been in the streets and public walks;—they have communicated freely with other children susceptible of the infection, and not only the small-pox did not spread, but there did not occur, to my knowledge, any distinct instance of communication of the disease from one individual to another, in the streets or promenades.” *Yet the small-pox spreads only by contagion.* Dr. Haygarth, in his “Enquiry how to Prevent the Small-pox,” has given us an accurate account of this epidemic in Chester, in 1777:—“At the beginning,” says he, “two or three families were seized, not immediate neighbours, but in the same quarter of the town. Afterwards, the poor children in several parts of the town were attacked at a considerable distance—in some places half a mile—from each other.” Yet many portions of all the large streets were not infected in November, (the epidemic began in May,) but so late as December and January the distemper returned to attack many who had escaped when it was in their neighbourhood some months before. In the middle of the city, in one street,

(King-street,) of twenty-four who never had passed through the distemper, only two, both in the same house, were attacked. During the summer and autumn of 1777, while this epidemic was general in Chester, many of the surrounding villages, (as Christleton, Barrow, Tarvin, &c., and some larger towns,—as Nantwich, Neston, &c.,) were visited by the small-pox in one or more families; yet *the distemper did not spread generally through any of these towns.*" We ask, have not such irregularities occurred in cholera? Do they prove the non-infectious character of cholera, when the same circumstances attend such a notoriously infectious disease as small-pox? Positive facts of contagion are not to be laid aside for negative facts, which disturbing causes as clearly explain as they do the perturbations of Uranus. Though these puzzled the astronomers for some time, no one was bold enough to attribute them to the non-existence of the laws of gravitation. In the *Provincial Journal* of November 15th, I have related the circumstances attending the invasion of cholera in the village of Bere Regis in this county, in 1832. One solitary case from London, where cholera was raging, terminated fatally. Within a month, twelve other cases of Asiatic cholera occurred, six of which were fatal. Not a single town or village around Bere presented a case before or since that period. Such well-marked and definite instances are not to be explained away.

We will add another signal instance of contagion during the present epidemic:—A boatman on the canal, with his wife and family, returned a few weeks ago from London, where cholera was of frequent occurrence on the river. They were seized with illness on the way. One child died on the passage, and they were all very ill when they arrived at the village of Offchurch. They were put into a room occupied by other persons. No suspicion of cholera existed. After the death of the woman and two children it was suspected that they had been poisoned and an inquest was held. The truth now became manifest, and eight other cases occurred, six of which proved fatal. Within the last fortnight four fresh cases have occurred. Now, Offchurch is a village in the very centre of England; no case of cholera had occurred in its neighbourhood until the fatal boat from London introduced it. Had such facts occurred with regard to small-pox, not the slightest doubt of contagion would have existed in any mind. The style of reasoning must be very far-fetched which refuses a parity of logic for the Asiatic cholera. We deem these instances glaring and decisive, and little short of the "*Experimentum crucis*" of Lord Bacon.

The contagion of hooping-cough is one in which the atmosphere forms the vehicle of morbid germs, but in which no eruption like the *exanthemata* exists. Within the last six months it has fallen to my lot to trace its invasion of a village in Dorsetshire, owing to the

importation of a single case from Portsmouth, and during the same period a connection of a patient of mine has carried the disease to the island of Tenriffe, where the disease *never appeared before*. Soon after the introduction of the first patient, who had the disease on board-ship, (having caught it of a sister at school in the west of England,) the whole island became the subject of this contagious epidemic. It is quite erroneous to call this disease, or scarlatina, or measles, infantile diseases; they are diseases to which all adult mankind are liable, as is clearly proved when *they attack a new community*. The adults who have gone through the disease in countries where these epidemics have long existed are contagion-proof; the children are generally the only parties left susceptible of the poison.

This should teach us a lesson with regard to cholera. If possible, those only should be employed with the sick as nurses, who have gone through the disease previously; they are generally contagion-proof.

The February number of the *Journal of Public Health*, alludes in terms of high and deserved eulogium to the efforts of the Medical Staff of the army and navy in improving the health of the soldiers and sailors, by wise sanitary regulations. We think the praise is well deserved, but on the subject of contagion there is much still to be done, as will suggest itself to anybody who peruses the following short statement of facts, which have lately come to my knowledge. Last year six hundred men, principally fresh recruits from the north of England, were ordered to Portsmouth to embark on board a transport ship for Malta, to relieve our Indian regiments. They arrived in London, but instead of being located in barracks, they were distributed by their billets into various lodgings about town. The public houses provide these temporary accommodations instead of receiving them as inmates. On the following morning the regimental roll was read over at the station; every man, to his credit, responded to the call. They went by the train to Portsmouth, and embarked the same day. Before their arrival at Malta, the small-pox and typhus fever, which a few of the men caught in one night's sojourn in London, broke out, and they were obliged to go into quarantine at Malta, where two hundred lay sick, of which number eighty men died. The commanding officer was obliged to return invalided, and two hundred men were put *hors de combat* from this one night's exposure to the infection of indiscriminate lodgings found for them in London. At their depôt in Lancashire, the men were perfectly healthy. The ship was a large and roomy one, affording the usual accommodations; and contagion alone, which might have been guarded against by the men going into healthy barracks in town, was the *sole efficient cause of this dreadful mortality*, which exceeded that of the Pauper Asylum at Tooting. We have not heard that any verdict of manslaughter has yet been

recorded against any of the Government authorities, whose want of foresight led to this sad catastrophe! Mr. Grainger would have been puzzled to find Tooting drains and Tooting starvation to account for the mortality on board this Government ship!

In an article of mine, published in the *Provincial Journal* of November 15th, 1848, it was observed:—"The mortality from yellow fever on board the *Eclair*, in one of our own roadsteads, clearly proves that the scourge of Africa can propagate itself in the temperate climate of Britain; and while we keep up at an enormous expense of human life and treasure a blockading squadron along the African coast, in the vain hope of exterminating slavery by such means, it is very possible, at some future period, the fever of the Niger may locate itself for a while on the banks of the Thames." The last mail from the West India islands announces, in corroboration of my opinion of the danger arising from the African squadron if quarantine be abolished, the recent re-importation into Barbadoes, by a vessel from Africa, of this pestilential yellow fever, as an alarming fact. The African fever has been actually imported into this island by the very channel pointed out, and sixteen officers appear to have already fallen victims to the plague. We have not yet an accurate report of the number of the men belonging to British regiments who have been attacked and perished, but the quarantine of the *Eclair* at the Mother Bank was ridiculed by the non-contagionists, and in Barbadoes their free pratique system had its full fling, and has produced its frightful fruits. In the midst of the dying and the dead, we are told that the work of Sir William Pym, which demonstrated so conclusively the contagion of yellow fever, is read with terror and dismay, and the speculative dogmas of the non-contagionists are scattered to the winds by the force of facts patent to every understanding. No doubt we shall hear the old story of drains and swamps, and cess-pools, and dust will be thrown in the eyes of the community to prove that yellow fever has been generated in a locality where so little has been latterly known of it, that the medical officers seem to have mistaken entirely the character of the new disease, which baffled all their efforts. No isolation of the sick, no quarantine regulations, seem to have been adopted to arrest the first inroads of the invader, and the penalty of ignorance has been paid to teach (we hope,) the non-contagionists another lesson, which Sir William Pym has had great difficulty in enforcing on the authorities at home. We have no doubt the next news from the West Indies will bring us the mournful intelligence of the extension of this contagious disease, which committed such ravages in the last century that in some places the living could not bury the dead; yet Barbadoes is one of the healthiest of the West India islands.

We have been told on high authority that cholera invariably followed the fever-track; and learned

statistics designated the districts in which we were to expect it. The Registrar of Tooting, however, states that it has always been a healthy locality. Had the measles or scarlet fever broken out in an asylum where fourteen hundred pauper children were crowded together, they could not have more clearly shown their contagious properties than the Asiatic cholera has done. Twelve hours of the contagious emanations of a few cholera patients, are sufficient to infect a whole ward. *The diarrhœa is not the avant-courier, it is the cholera itself; complete separation from the non-infected, and ample space and ventilation should have been adopted on its earliest manifestation.* To suppose the drains of Tooting could have produced the disease, is manifestly absurd, as the inhabitants of the village, who were in the more immediate proximity, were, and are at this time, perfectly free from the malady. The recurrence of cases weeks after the boys had been removed into other localities, and the *fatal cases among the nurses who had never been at Tooting at all*, are direct proofs that *contagion alone was the efficient cause.* When the disease has spent its fatal influence on the more susceptible, it subsides spontaneously; and from Dr. McCann, at Bilston, down to Dr. Sutherland, at Glasgow, great credit is always given to those who are called to act in the last few weeks of a cholera invasion. It reminds us of the Prussian victory at Waterloo.

It is too much the fashion now-a-days to confound all distinctions in classifying diseases. The efficient cause of scarlatina and typhus is, without evidence, assumed to be identical. In earlier times small-pox and measles, and chicken-pox, were thought to be the same malady. Our modern pathologists, who took so much trouble to rectify the errors of ancient diagnosis, are now set aside as drivellers by men who deem yellow-fever, plague, typhus, and continued fever, only types of the same disease. We think the common sense of the profession will repudiate such dogmas, though stamped with the authority of our Board of Health.

We have already alluded to the fact that there are two essentially different diseases in all countries, in India as well as England, though we call one of them English and the other Asiatic cholera. If the specific name of cholera is to remain attached to the pestilential variety, the other should be called *choleroïd*, and the analogies of other diseases suggest the propriety of the distinction. Syphilis has its pseudo-syphilitic mimic in some of the forms of scrofula; there is the grocer's itch, as well as genuine psora. Febrile petechiæ somewhat resembles measles; typhus shades off into some of the forms of uninfected typhoid; variola possesses its varioloid imitations; roseola, with sore-throat, looks very much like scarlatina. We must not, however, confound these essentially different diseases, which require very different treatment, though

they possess some points of similarity. Typhoid, varioloid, scarlatinoid, and choleroïd, are available terms by which we may at the same time designate their differences as well as their resemblances. The *choleroïd* of the summer season of all countries depends on atmospheric or dietetic causes, though it may sometimes assume an epidemic and severe character, as it did in Sydenham's time. But the true pestilential cholera braves even a Russian winter, and so well-known is its grand commercial track, that its visitation is now pretty accurately predicted. *The laws of contagion alone can fully explain its calculable travelling propensities.*

We must, I fear, reasonably expect a general diffusion of the disease in the spring and summer of 1849. Its progress in Scotland has been in a far more rapid and fatal ratio than in 1832. The experience of Tooting should induce our Poor-Law Commissioners to revise all their dietaries, for the general plan sanctioned by them, of porridge and pea-soup feeding three or four times a-week, increases, as we have already shown, the susceptibilities of the pauper population. It is unfair that poor Drouet* should be made the scape-goat of such dietetic errors as have been sanctioned on high authority; and should cholera appear among the inmates of Norwood, I have no doubt we should soon find that the germs of contagion would produce their amply-developed fuel even in that establishment. The abolition of the whole system of farming the poor, should be immediately insisted upon by the Poor-Law Commissioners; and if they abolished at the same time the practice of farming the medical supplies, it would be a great improvement on their system. Physic as well as food should be supplied as they are in our hospitals and dispensaries, and the skill and attention of the medical officers should alone form the basis of their remuneration.

The inconveniences of quarantine laws to a commercial nation like England, holding extensive and rapid communication with all parts of the world, have produced for many years a strong tendency to question their propriety, to obtain a modification of their stringent application, or at once to get rid of them entirely. If it be a fact that these laws have never yet been able to accomplish the object for which they were designed,—that evasions and illicit communications have generally rendered them nugatory,—that the facilities of modern travelling by sea and by land, through the application of the steam engine render them intolerable and less effective than in the earlier states of society, let the Government abolish quarantine with its eyes open, and with a full recognition of the risks we are to run. These questions ought not to weigh one *iota* in the scale when we enter upon the specific inquiry as to the contagiousness of any disease. It may be true

that quarantine laws are now no longer practicable, and yet the plague and the cholera, and the yellow fever, may be infectious. We do not wish to mix up the abolition of the quarantine system with the strictly medical enquiry; the one belongs to the sanitary police of nations, the other involves pure medical truth. Let not, however, the quarantine laws be abolished on a fictitious plea, and under false pretences. If commercial reasons are of sufficient importance to induce a great commercial people to suspend or abrogate these laws, let those reasons rest on their proper basis. We must not bend medical truth to meet the demands of modern society. On the quarantine system I have now no purpose to enter: our present enquiry is limited to the contagion of pestilential cholera; neither do I wish to mix it up with those sanitary improvements which experience has taught to be so essential to the well-being of the community. *Good drainage, ample space, fresh air, a copious supply of pure water, and the removal of all filth and impurity, are valuable and necessary conditions for the healthy physical, and moral development of man; they are sacred projects which I would not for a moment interfere with or oppose; they have an important influence on the health of man, and the course of all diseases, whether contagious or not. These objects, however, must not be advanced at the sacrifice of truth; they must not be obtained surreptitiously by false statements, erroneous inferences, or unfounded perversions of facts; it is too holy a war for such desecrated weapons. A pious fraud may suit the morality of the mediæval period: it is not justifiable in the nineteenth century.*

To sum up, then, the results of these enquiries, we are driven to the following conclusions:—That the cholera is a contagious disease;—that the morbid germ has a period of incubation, varying from three days to a fortnight;—that the milder diarrhœa which, *pari passu*, accompanies the severe form of cholera, is a variety of the same essential disease;—that the emanations from the bodies of the affected, whether in the stage of diarrhœa, collapse, or consecutive fever, are productive of the genuine Asiatic cholera;—that the arrest of diarrhœa, though it does not always prevent cases from running into collapse, is of the utmost importance in mitigating the severity of the disease; and should be considered as the first stage of cholera, to be met by the most prompt medical interference; and careful watching;—that the susceptibility of receiving the disease, in the severest form, is very much lessened by regular, solid, and wholesome diet, partaking in a suitable proportion of animal food, and moderation in the use of stimulants;—that the contamination of fæcal evacuations being the most fertile source of the disease, demands the most cleanly sanitary arrangements; (the exuvie of the skin in small-pox and scarlatina, produce those special diseases alone, as the-

* Since this article was in type, we learn that Mr. Drouet is seriously ill; the report of his death is contradicted.

exuvæ of the mucous membrane produce the special disease of Asiatic cholera; the ordinary results of common vegetable or animal putrefaction being quite of a different character;) that the contagion may be mitigated by the free ventilation of the sick, and the non-concentration of the poison, the purification of the clothing, bedding, and utensils of the affected, should be carefully enjoined;—that its introduction by tramps and vagrants has already, in numerous instances, propagated the disease;—that its invasion of Belfast, New York, New Orleans, and the Texas, in a less time than it has taken to reach our western ports, proves its more easy communicability by means of shipping, and its necessarily *contagious properties*.

The English word contact has nothing to do with the meaning of contagion. Contact is, mathematically, impossible; and the contagion of scarlet fever, whooping cough, &c., &c., are never connected with the idea of physical touch or contact. Neither has the term been used with such restrictions by any medical writer of the contagionist party, or by the public, or by the Legislature. Even Virgil himself does not refer to actual contact when he says—“*Nec mula VICINI pecoris contagia ludent.*” Vicinity is quite near enough, without actual touch. Those who use contagion only in the sense of contact, must be narrow-minded classics, for no fair rules of criticism can justify the exclusive meaning which they would attach to the term contagion.

The history of “Asiatic Cholera” now reaches a period of thirty-two years. *We have no record of any epidemic which could continue in existence in successive years over the various climates of the globe for so long a period, without the ever-living and active principle of contagion as its efficient cause.* No atmospheric cause could have continued in existence so permanently and unchangeably as to produce the same identical disease in all the countries it has visited. Even now many insular situations have been left entirely unvisited. No cause of telluric or magnetic origin could have given birth to such a roving pestilence. We are driven, *par voie d'exclusion*, to the one cause of contagion, and till that is generally acknowledged and fairly met, we are like sailors navigating without a compass. Boards of Health are, indeed, truly enough described by Lord Carlisle, as only Boards of Works, and those works are of a very questionable and blind description. Their first fundamental principle of non-contagion is erroneous; no wonder they flounder on as the registrars of a mortality far greater than their predecessors. The philosophical historian, Gibbon, takes the same view of contagion as the poet Virgil. The graphic description which he gives of the plague in the time of Justinian may be quoted as a beacon for modern times. “Contagion is the inseparable symptom of the plague, which, by mutual respiration, is transfused from the infected persons to the lungs of those who

approach them. While philosophers believe and tremble, it is singular that the existence of a real danger should have been denied by a people most prone to vain and imaginary terrors; yet the fellow-citizens of Procopius were satisfied by *some short and partial experience*, that the infection could not be gained by the closet conversation, and this *persuasion might support the assiduity of friends or physicians* in the care of the sick, whom *inhuman* prudence would have condemned to solitude and despair. But the *fatal security*, like the predestination of the Turks, must have *aided the progress of the contagion*, and those *salutary precautions* to which Europe is indebted for her safety were unknown to the government of Justinian. No restraints were imposed on the free and frequent intercourse of the Roman provinces; from Persia to France the nations were mingled and infected by wars and emigrations, and the pestilential odour which lurks in a bale of cotton was imported by the abuse of trade into the most distant regions. The mode of its propagation is explained by the remark of Procopius himself, that *it always spread from the sea-coast to the inland country*; the most sequestered islands and mountains were successively visited; the places which had escaped the fury of its passage were alone exposed to the contagion of the ensuing year. The winds might diffuse the subtle venom, but unless the atmosphere be previously disposed for its reception, the plague would soon expire in the cold and temperate climates of the earth. Such was the universal corruption of the air, that the pestilence which burst forth in the fifteenth year of Justinian, *was not checked or alleviated by any difference of the seasons.* In time its first malignancy was abated and dispersed: the disease alternately languished and revived; but it was not till the end of a calamitous period of fifty-two years that mankind recovered their health or the air resumed its pure and salubrious quality. No facts have been preserved to sustain an account or even a conjecture of the numbers that perished in this extraordinary mortality. I only find that in three months five, and at length ten thousand persons perished each day at Constantinople,—that many cities of the East were left vacant, and that in several districts in Italy, the harvest and the vintage were left withered on the ground.”

In conclusion, then, I would seriously advise the lay-members of our Board of Health, to associate with their body some of those members of the medical profession who recognize the principle of contagion as the efficient cause of cholera. Fundamental errors have been already committed, as the statistics of the progress of cholera during the last four months clearly prove. Let it not be recorded against them at the end of the year, that the ultimate mortality has exceeded by one-fourth that of the last invasion. Sanitary laws are better understood than they were in 1832. The

removal of the potato as a general article of food has thrown our population upon the healthier cereals for their sustenance; and the resources of medicine have been replenished with new agents available to meet the evil, while the general recognition of the disease in its early and premonitory symptoms, offers a fairer opportunity for the employment of those resources which are not only within our reach, but are proved to be so efficient in the first stage. All these circumstances combine to render our defences against the foe more definite and more complete. The contagious principle of the epidemic being authoritatively denied by our Board of Health, must influence the practice of a large portion of the misguided community, and the means of arresting and destroying that contagion, cannot be enforced by men who "discredit the once-prevalent opinion, that the cholera is in itself contagious." Here is the weak point of our citadel of defence;—here is the Trojan horse which lets in the armed enemy into our besieged towns. The confidence of the profession is already shaken in our Board of Health, and should a far more fearful mortality await us, a verdict of "manslaughter" may at some future period be recorded against a body who have failed in pointing out the first fundamental law of a disease, which the last Board of Health, under the presidency of Sir Henry Hallford, did not fail to recognize and act upon.

ON OLEAGINOUS ALIMENTS IN TUBERCULAR PHTHISIS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

As one of the readers of your valuable Journal, and a sincere admirer of the intellect and research displayed by the talented authors of papers contained there, and in the "Transactions of the Provincial Medical and Surgical Association," I take the liberty to offer a few remarks on the concluding portion of Dr. Shearman's elaborate paper "On the Treatment of some of the Principal Diseases of the Chest," and published in the last part of the "Transactions." This I do from no desire to depreciate the merits of that justly prized essay, but solely for the sake of eliciting opinion upon the subject.

At page 42, Dr. Shearman states, that in the treatment of phthisis pulmonalis, "the imperfect nutrition will be best overcome by an easily digestible and nutritious diet; milk substances abounding in *oleaginous*, rather than *albuminous* principles," &c. &c. The boasted good effects of naphtha, he says, are attributable to its powers of allaying the irritability of the stomach, and thus enabling the patient to take nourishment. In following the second indication, cod-liver oil rectified is a most valuable remedy. Again, at page 44, he says,—“In attending to the second indication, those

aliments should be *avoided* which tend to increase the supply of *hydro-carbon* to the blood, such as animal food abounding with *fat*, alcohol, &c. &c., and the principal meals should be made from lean meat, and other *albuminous* and *fibrinous* articles," &c.; and he further adds, "that phthisical patients who take a large quantity of cod-liver oil almost invariably become stouter under its use; that it is, doubtless, a tonic, and deobstruent, from containing iodine and bromine, and conveys nourishment to the system in such a form as not to excite;" and he asks, "Can it supply *hydro-carbon* to the blood in a better form than other aliments do, so as to require less oxygen to keep up animal heat?" He also states that "cod-liver oil deprived of its stearin possesses a solvent power over the fat of tubercular deposits, and that this is the opinion of Drs. Bennett and Williams."

It occurs to me that there exists a decided contradiction (perhaps it is a misprint,) in the assertions contained in these passages I have quoted; for, first, we employ substances abounding in oleaginous, rather than albuminous, principles, (and here cod-liver oil does not seem out of place;) but, secondly, why avoid aliments which tend to increase the supply of hydro-carbon, such as animal food abounding with fat, if we are still to employ, as an article of aliment or medicine, cod-liver oil, a hydro-carbon, and with a view to furnish this very substance more completely to the blood? Can it be possible that we are directed in the second instance to avoid fat meat, because tubercular matter is here considered to resemble the stearin in its chemical properties, so that olein thus deprived of this principle can meet in the lungs tubercular matter and dissolve it? If so, I think this theory had better be stated plainly by all who entertain it. Does the matter of tubercle then resemble stearin chemically? If so, why give, in the first instance, oleaginous diet, by which, I understand, meats and soups, abounding in fat, with stearin in abundance? Why thus endeavour to make the body fat, why not rather emaciate the subject of our experiment, rather than thus designedly throw obstacles in the way of the solvent action of our remedy; and again, if stearin and tubercle be in any way analogous substances, our proceeding thus should generate tubercles, and all those who live on the fattest food should have most tubercle. I need scarcely say that such is contrary to all facts and experience. Moreover, the advocates of this solvent theory should select, not cod-liver oil, but much thinner oils, and such as are much more free from stearin.

I thought it had been a fact already established by experience, that neither iodine nor bromine, employed in any doses, large or small, seemed to affect remedially the matter of pulmonary tubercle. Can the infinitesimal quantities of these substances contained in cod-liver effect a reverse of this experience? If so, then let the homœopathists rejoice, for theirs will be a triumph indeed. And lastly, we cannot but remember, how confidently it was asserted not long since, that pyro-acetic spirit (a hydro-carbon,) possessed the happy property of dissolving perfectly the matter of tubercle, both as it existed within the body, during life, and when removed after death; but has this not been proved by experience to

have failed most signally to exert any curative power over tubercular disease, and can we feel justified now in attributing to cod-liver oil this curative property, even supposing we could assign to it an equally solvent power, which I have not as yet seen it asserted that it possesses? I admit that we can take much more of the oil which does not injuriously stimulate, but this does not solve the difficulty.

In these strange times on which we have fallen, it may appear philosophical to advocate that an old exploded article of the Pharmacopœia of the ancients, after holding for centuries an honoured reputation with the hydromel, the roasted lungs, and the *liver of the fox*, as recommended by Celsus, for the cure of asthma and dyspnœa, and long since buried in the tomb of all the Capulets, should now be exhumed and offered as a certain cure for phthisis, and sanctioned by the authority of the names of the wisest and best amongst us. That cod-liver oil may be a fluid as easily assimilated as whale or other oils, I can understand; that nutrition of the body may often result from its hygienic employment, I admit; but that the enthusiasm with which it has been lately re-ushered into practice is not based on correct physiological or chemical principles, I fear; and that it is destined to meet, at no very distant period, a sad reverse of its present professional popularity I will not assert, but do most sincerely apprehend, while at the same time it would afford me much pleasure to be able to hope, that in this I should find myself agreeably disappointed.

I have the honour to be, Sir,

Your very obedient servant,

J. CAREY, M.D.

Lyme Regis, January, 1849.

EFFECTS OF CROTON OIL APPLIED TO THE HUMAN HAIR.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

The following case is perhaps more amusing than instructive, but contains one or two points deserving of attention:—

A few weeks since, early in the morning, I was requested to see a young woman who was very ill in the head. On visiting her I found that, among other attractions, she had a very fine head of hair, over which I was given to understand she was very choice, and had taken very great care to preserve it. For this purpose she had used all the known hair-oils and pomades, having no doubt read, or been told by some celebrated tonsor, that a fine head of hair was the first addition to beauty. Believing this, she applied anything in the shape of grease or oil that was recommended, or she could lay her hands on. Having gone to a new apartment, she found in a cupboard where she disrobed, a very little bottle of oil. Being so small she thought it must be very valuable, and as such, would be a very nice thing for her hair, and she dressed her hair with it at night, and retired to bed. When she awoke up in the

morning, to her great astonishment, she found that she had, by the application of this newly discovered oil, enlarged her head to an enormous size, and what added much to her annoyance was, that her eyelids were so much puffed up, as to be incapable of performing their office, so that she could not see the wonderful effects of the contents of the little bottle she had found, and therefore could have no conception of the transfiguration it had caused. It was for the effects thus produced that my professional assistance was required. She herself thought they arose from what she had used about her hair on going to bed. I requested to see the oil she had been using. The bottle was produced, which at once explained the cause of all the mischief that had been done. It was the usual sized bottle of the *Oleum Tiglii*, or croton oil, which I think contains about a drachm. The whole had not been used. I have never seen it used externally, but I believe if it is rubbed on the skin it generally causes an eruption of a pustular kind. In this case there was nothing of the sort; there was very great constitutional derangement, which I think was brought on more from the fright than from the mischief that had been done; she complained of great heat and pain about the head and the scalp, which was unusually swollen, and gave the sensation of pressing a cushion when the hand was applied to it. There was no appearance of inflammation; the forehead looked more like marble than anything else; the eyelids were rather red, but not like inflammation; still there was great heat over the head. With cold applications and saline purgatives, all the symptoms subsided. In the course of this and the next day my patient was well. The only point that I can see deserving notice in this, which I suppose may be considered as rather a singular case, is the extraordinary and rapidly absorbing power of the human hair, as well as the potency of the *Oleum Tiglii* as an irritant. I should say that there were not more than twenty drops of the croton oil used, and not one drop of it could have touched the scalp.

I am Sir, your obedient servant,

Bath, December 26, 1848.

GEO. KING.

NEW ANÆSTHETICS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Though my paper "On Anæsthesia, and the Agents by which it may be produced," will appear in the forthcoming part of the next volume of the *Transactions of the Provincial Medical and Surgical Association*, now in the press, yet as some little time will necessarily elapse before it can be published, it may not be improper nor without interest, to state, that amongst the many substances upon which I have experimented, there are two which are most worthy of attention, as of easy practical application.

The one, which was amongst the earliest I tried, is common coal gas. It is a safe, manageable, and effective anæsthetic, and very cheap as everybody knows; though

the smell is at first unpleasant, it is inhaled without difficulty or repugnance.

The second is a substance which I have more recently discovered, and if my anticipations be well founded, it will be found to be the best agent yet mentioned, and will, I think, supersede those now employed.

I believe it to be possessed of all the good properties of chloroform, and in a great degree free from those which are objectionable. It is equally pleasant, potent, and speedy in its action. The anæsthesia produced by it may be rendered as profound and as prolonged as may be wished. While a smaller quantity of it than of chloroform, will produce a sufficient degree of insensibility, a larger quantity may be given with impunity. The state of collapse is not so great. The animal may be recovered from a more dead-like condition than where this is induced by chloroform; at the same time the process of recovery is more rapid, and it is unattended by any of those distressing symptoms so often witnessed in animals rallying from a large dose of chloroform.

The substance is the *chloride of olefant gas*, as named in "Fownes' Manual;" the hydrochlorate of *chloride of acetylene*, or *oil of olefant gas*, in the eighth edition of "Turner's Chemistry;" and formerly called *Dutch oil*, or *oil of the Dutch chemists*.

In appearance and smell it is not very dissimilar from chloroform, but in composition it differs most materially. Chloroform being composed of *two* atoms of carbon, *one* of hydrogen, and *three* of chlorine, with a boiling point of 140° , the specific gravity of the liquid being 1.480°, of the vapour 4.2° ; while the chloride of olefant gas is composed of *four* atoms of carbon, *four* of hydrogen, and *one* of chlorine; its boiling point is 180° , the specific gravity of the liquid 1.247°; of the vapour 3.4484° ; constituting differences which are very important, and sufficient, I believe, to explain the facts of its superiority.

I need not here detail any of the experiments upon which this statement is founded, nor the reasons which induced me to make trial of this and many other substances, as they are mentioned at length in the paper to which I have alluded, and which will shortly be in the hands of the members of the Association, my object now being simply to mention the fact.

I am, Sir, yours faithfully,

THOMAS NUNNELEY.

Leeds, Feb. 12, 1849.

CASES FROM PRIVATE PRACTICE.*

By JOHN RICHARD WARDELL, M.D., Edin.

Late President of the Royal Physical and Hunterian Medical Societies, Assistant Pathologist in the Royal Infirmary, Edinburgh, &c. &c.

CASE X.

SCORBUTUS.

T. H., aged 47, a broom-manufacturer, looks pale and emaciated, volume of flesh much reduced, muscles feel flabby and resistless.

January 8, 1847. States that for some years he has laboured under considerable indigestion, which has been accompanied with some pain in the epigastrium and hypochondria; has consulted several physicians, but without any benefit; during the last two years his diet has almost entirely consisted of stale wheaten bread and tea; says that he cannot digest animal food, and in the period mentioned has never taken any, with perhaps the exception of occasionally eating a very small quantity of mutton; for years has not been able to eat a full meal; a sense of fullness and distension has long been experienced after eating; pains in the head, chiefly near the frontal region, invariably follow taking food. Six months ago the gums, without any assignable cause, gradually became tender, and vascular-looking, this symptom by degrees increasing in intensity until the present time, when they are red and spongy-looking, and constantly bleed; soft food can now only be taken on account of the affection. On the anterior aspect of the right thigh, in September last, (four months ago,) a number of small ecchymosed-looking petechiæ were just observed, varying from the size of a flea-bite to that of a No. IV. shot; these came gradually, disappeared, and were succeeded by others of a like character. The left thigh in the course of a few weeks after assumed the same condition. On the internal aspect of each thigh, a little above the knee, and corresponding with the lower half of the femur, two dark, large, livid patches made their appearance in October last; their colour was of an inky blue, and they seemed as if they had been produced from a violent blow from some even-surfaced body; they have to this date maintained the same characteristics; the one on the left thigh measures about six inches by four; the one on the right is somewhat smaller. The inferior extremities are now œdematous, and the knee cannot be flexed without the feeling of considerable tightness and pain; at the flexures of both, the skin feels tense and indurated; no discolouration; looks rather paler than natural; right knee swelled; bowels often relaxed, fæces being lighter coloured than normal; complains of no tenderness on pressure in hypochondria or epigastrium; says he often experiences some degree of pain over the umbilicus; skin feels dry and harsh; pulse soft, of tolerable volume, 74; tongue paler than natural, and covered with a dirtyish-white coat; lips blanched. Has taken no medicine for some months, with the exception of an occasional dose of the common aperient pills.

Ordered strong concentrated soups, and puddings of sago, rice, &c., (these to be varied as much as possible,) and vegetables. R. Quin. Sulph., gr. v.; Acid. Sulph. Dil., dr. iss.; Tinct. Card. Co., oz. ss.; Infus. Calumb., oz. viiss. Sit mist. cujus capt. oz. ss. ter die in aqua.

18th. Feels in all respects better; soups and puddings have not disagreed with him; gums not so tender, and less spongy, are more naturally contracted, and reported not to have bled so much; eruption less distinct, and the large ecchymosed patches assuming a yellowish tint. Ordered rabbit, fish, or fowl to be taken; also three ounces of port wine daily. Repet. mistura.

February 21st. Much improved in every respect;

* Continued from page 572 of last volume.

countenance more healthy; gums to appearance almost natural. Can take his prescribed diet without being affected with uneasy distension at the stomach. Livid patches fast disappearing, and petechia well nigh gone; less swelling and stiffness in the extremities; bowels moved in natural frequency, and stools improved. Contin. *mistura tonica et vinum rubrum*.

March 29th. Can now eat mutton to satiety, without suffering from pain in the stomach as previously. Takes bottled porter every day to his dinner. Is enabled to go out every day, and walks much better. R. Tinct. Ferri Sesquichlor., dr. j.; Aquæ, oz. vj.; Tinct. Hyosc., dr. ij. Sit mist.; capt. oz. j. ter die.

April 20th. Well, and pursues his occupation.*

(To be continued.)

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF PROFESSOR SANDS COX, F.R.S., SENIOR SURGEON TO THE HOSPITAL.

Reported by PETER HINCKES BIRD, late Resident Medical Officer.

CASE XIV.

ENCEPHALOID TUMOUR ON THE HAND.

Robert Anston, aged 69, labourer, admitted as in-patient on the 26th of October, 1846, under the care of Professor Cox. He states that, twenty-one years ago, he received a pinch on the little finger of the right hand; it mortified, and was consequently amputated at the metacarpophalangeal articulation. It healed slowly, and got quite well. He further states that about three years ago he perceived a smooth circumscribed tumour, referred to the integuments, covering the middle of the fifth metacarpal bone of the right hand; it gradually increased in size until the present time, becoming lobulated, and attended with severe lancinating pain, which was worse at night. About four months ago it ulcerated, and discharged a thin matter. Both his parents are said to have died consumptive. He states that he has always been a hearty man. Can assign no cause for the appearance of the disease.

Present state.—There is a large ulcerated tumour, about the size of an orange, covering the integuments of the fourth and fifth metacarpal bones; the edges of it are elevated, being on the palm of the hand, about an inch and a half high, with two shallow ulcerations on it; the edges are also indurated and irregular;

complains of much sharp, jumping, lancinating pain, which is worse at night; the pain does not extend up the arm; there is no swelling of the axillary glands; countenance sallow and dejected; feels low, but appetite is good; tongue clean; bowels open; sleeps pretty well at night; would sleep very well were it not for the pain in the hand. R. Liq. Opii Sed., m. xl.; Aquæ Menh. Pip., oz. j. Fiat haustus omni nocte.

November 4th. The disease has certainly increased since last report; he cannot bend the ring finger so well; sleeps better after the draught. Cont. haustus.

9th. There is considerable discharge from the ulceration, of an offensive odour; the pain is more severe, but is confined to the spot.

13th. The mass of disease, with the ring finger and remains of the little finger, were removed this morning by Mr. Cox. An incision was made on the palm of the hand, from the ulnar side of the wrist to the interval between the middle and ring fingers, and a similar incision was made on the back of the hand, thus including the whole of the diseased mass; the knife was then carried between the third and fourth metacarpal bones, and the fourth and fifth metacarpal bones were sawn through just above their articulation with the carpus. He bore the operation well. Pulse 90, feeble. One artery required ligature. The edges of the wound were brought together as close as possible, and a fold of damp lint applied.

The fungoid mass entirely surrounded the fifth metacarpal bone, and partly the fourth, and when cut into, it was found to be composed of a soft brain-like substance, intersected by fibrous bands, and was closely adherent to the integuments above and to the periosteum below, none of it being visible below the last-mentioned structure. A portion submitted to microscopic examination was found to contain numerous caudate nucleated cells.

14th. Slept but little last night; pulse quick; tongue furred.

15th. Feels better; slept indifferently last night; bowels open; does not complain of much pain; pulse 98; tongue furred; had rigors this afternoon; bowels confined; complains of thirst. Mist. Salin., oz. j., quartis horis. Extr. Col. Co., (Palmeri,*) gr. x., statim. Morph. Hydrchlor., gr. j., omni nocte.

17th. Slept well last night; bowels open; pulse 90; tongue cleaner; the wound looks sloughy, and discharges a very offensive matter.

19th. Had three rigors to-day; is in no pain; tongue dry and rather brown; bowels open; appetite bad; pulse 120, weak; slept pretty well last night after the morphia; the wound looks very unhealthy, and matter has formed near the head of the ulna. Continue the medicines. To have six ounces of wine; mutton-chop, &c.

20th. Much the same; slept pretty well last night; tongue covered with a brown fur; pulse 102, weak; does not complain of pain; the abscess over the head

* Some weeks subsequent to the last report the patient informed me that during a recent journey which he had taken, he was unavoidably exposed to a heavy rain for some hours, until he was thoroughly drenched—indeed he had not been so wet for fifteen years before, yet he did not take any cold, felt no stiffness, nor was in any respect subsequently affected, shewing that his health was decidedly re-established.

* The extensive use of this preparation at this Hospital enables me to speak of it in the highest terms as a safe, agreeable, and sure purgative. It is prepared by Robinson, Palmer, and Palmer, of this town.

of the ulna has broken, leaving this process of the bone bare; there is considerable inflammation extending from the hand upwards to the arm. Continue medicines.

21st. Sleeps pretty well; tongue clean; pulse 99; the abscess discharges freely, but the inflammation still continues, the redness extending up the arm above the elbow; the wound looks very unhealthy, and the discharge is very fetid.

22nd. Countenance sunken; feels low; pulse 118, weak; an abscess is forming at the base of the thumb. R. Ammon. Sesqui-Carb., scr. j.; Inf. Gent. Co., Oss. Sum. oz. j., ter die. Continue wine. A pint of ale daily.

23rd. Feels very low and dejected; pulse 102, small; slept pretty well last night; bowels open; tongue covered with a brown fur; appetite bad; much discharge of offensive matter from the abscess on the thumb, and from that on the head of the ulna.

24th. Evidently sinking; pulse 106, small, and readily compressed; tongue rather coated and dry; slept indifferently last night; great discharge from the wounds.

25th. Has had many rigors; pulse 108, weak; tongue dry and glazed; appetite lost; countenance pinched.

26th. Much worse; skin cold and clammy; countenance pinched and congested; pulse very weak. He gradually sank, and died at 11 a.m.

Section cadaveris. Body well developed, with a considerable layer of adipose tissue over the abdomen. Brain healthy; all its arterial vessels contained more or less of an atheromatous deposit. Thorax:—There was much fat deposited about the heart; firm adhesions existed between the pleura-costalis and pleura-pulmonalis on the apex of the right lung. The air-cells of the lungs were much distended with air; there was much congestion (probably *post-mortem*), of the posterior surface of the lobes; there were some scattered cretaceous deposit, about the size of a large pea, on the apex of the lung; they were also present, but in less quantity, in the right lung; no secondary deposits of cancer could be detected on the most minute examination; the bronchial mucous membrane was extremely congested, and the bronchi contained much frothy serum. There was a moderate quantity of fat about the root of the heart; right side of the heart healthy; the auriculo-ventricular opening on the left side was partially surrounded with a cartilaginous deposit, and to the inner side of the mitral valve was a considerable deposit of ossific matter, of the size of a kidney-bean; the aortic valves were healthy, with the exception of their being pervious, having several small oval openings in them. Abdomen:—The liver appeared healthy; there was no secondary deposit to be seen in it; its structure was more friable than natural. The right kidney contained in its interior, and at its upper part, a cyst, which would contain a chestnut; it was filled with light-coloured serum. All the other viscera appeared healthy.

From a careful study of the history and appearance of the tumour with which this unfortunate individual was affected, we glean the following facts concerning it:—

1st. That it appeared as a smooth circumscribed tumour, which he referred to the integuments.

2nd. It increased in size with great rapidity, and acquired a lobulated surface, and was attended with severe lancinating pain, which was exacerbated at night.

3rd. The integuments became affected, and after a time gave way, leaving a large ulcer, having ragged, everted, and elevated edges, and discharging a sanious and fetid matter.

From the consideration of the preceding facts, we have no difficulty whatever in arriving at the conclusion that the tumour was malignant, and of the variety termed encephaloid; and this conclusion is much strengthened by the slow, anxious and dejected countenance, the great debility, and the emaciated appearance of the patient, who, it should be borne in mind, is stated to have enjoyed uniform good health, and in whom no disease could be discovered, (save the tumour,) capable of accounting for the constitutional affection.

Having thus ascertained the nature of the tumour, we have now to determine its seat.

From very slight attention to the history and symptoms of the preceding case, it will be evident that it must have originated either in the subcutaneous cellular tissue, or beneath the periosteum. Now, when tumours have their origin beneath a strong fibrous membrane, like the periosteum, they are necessarily of slower growth, more dense and resisting, smoother, more flattened and diffused than when they originate beneath a readily extensible tissue, like that composing the skin; consequently, bearing in mind the description of the tumour which has been given above, it will be seen that the only conclusion to which we could come was, that it originated in the subcutaneous cellular tissue. This conclusion is confirmed by the pathological examination of the diseased mass, which is described as being "composed of a soft brain-like substance, intersected by fibrous bands," and as being "closely adherent to the integuments above, and to the periosteum below, none of it being visible below the last-mentioned structure."

Nothing could be ascertained with certainty respecting the cause of this disease, excepting that it was not hereditary. The patient did not ascribe the origin of the tumour to any blow or other injury of the part.

The treatment of this case may be considered under two heads:—

1st. Was it advisable to recommend the removal of the diseased mass?

We believed the patient to be labouring under a malignant disease, which was, as far as we could ascertain, purely local. The axillary glands were not affected; the lungs and other viscera not obviously diseased; in fact there was no circumstance which militated against the success of an operation, except the advanced age of the patient. While, on the other hand, it was perfectly certain, that if the diseased mass was not removed, it would before long terminate in his death, either from the pain, exhaustion, and sleeplessness consequent on it, or which was equally probable, from the development of secondary cancerous deposits in the viscera; consequently, we could not

doubt the propriety of recommending the patient to submit to the excision of the tumour.

2nd. What operation should be performed?

In considering this question we must bear in mind a principal and important rule in surgery, of saving as much of the hand as possible; it is, indeed, our duty to do so, especially in operations on the right hand. The patient was a labouring man, and, therefore, if part of his hand could have been saved, it would have been of considerable service to him, an attempt was therefore made to preserve as much of the hand as could be done without including any of the diseased mass. The case, however, proceeded unfavourably, for it appears that on the second day after the operation, he had rigors, followed by inflammation, and the formation of abscesses at the head of the ulna and ball of the thumb, and diffuse inflammation of the arm. Had amputation of the fore-arm been performed, the result would have probably been different.

The immediate cause of death depended, no doubt, on the inflammation of the hand, and consequent supuration, occurring in a patient whose vital powers were nearly exhausted.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, FEBRUARY 21, 1849.

The Return of the mortality and state of the public health for the quarter ending December 31st, just issued by the Registrar-General, presents a much more favourable view of the sanitary condition of the country during the period referred to, than could have been expected. The mortality of the quarter, notwithstanding that the malignant cholera had for several weeks made its appearance in the eastern districts, is below the calculated average, and very considerably less than that of the corresponding quarter of the preceding year. The mortality of the districts included in the returns, during the months of October, November, and December, of the year 1847, amounted to 57,925 or 10,068 more than the calculated number; that of the quarter just ended was only 46,124, or 2,571 less than the calculated number, and 11,801 less than in 1847.

The following statement shows the general character of the diseases which proved fatal in London:—

“The deaths in London were 14,725, of which 5137 were caused by diseases of the zymotic class,—namely, 1765 by *scarlatina*, 883 by typhus, 472 by whooping-cough, 126 by erysipelas. *Scarlatina* has been epidemic, and has raged with great violence; it has destroyed more lives than any other disease, and shows no sign of

abatement. The deaths by *scarlatina* in each of the four quarters of 1848, were 615, 816, 1560, and 1765, making 4756 deaths in the aggregate. Small-pox was fatal to 413 persons, chiefly children, who had never been vaccinated. The deaths from small-pox in the autumns of 1841-47, were 75, 108, 114, 571, 106, 42, and 372. Nearly all these deaths arose from the neglect of vaccination, which, under a recent Act of the Legislature, is, nevertheless, gratuitously performed on all applicants, at stations in every district of London. Typhus was fatal to 883 persons. This disease is decreasing, for the deaths in the autumn of 1847 were 1279. The deaths from cholera were 468. The deaths in the autumns of the seven previous years were 3, 13, 14, 5, 11, 15, 12. Consumption was less fatal than usual, only 1450 persons died of that malady. Heart diseases, lung diseases, and liver diseases, were much less fatal, not only than in 1847, when influenza was prevalent, but less fatal than in the autumn of 1846. A hundred and sixty-three mothers died in childbirth; about 17,774 children were born alive; so that one mother died to every 109 children born alive. Of the deaths, 100 were ascribed to *metria*, or childbirth-fever. The mortality from this cause is high, and deserves grave consideration. Thirteen deaths were ascribed directly to intemperance. Thirty-four deaths were referred to *delirium tremens*, generally the result of drinking spirits to excess—a slow but certain suicide. Of the violent deaths, 24 were caused by poison, 31 by wounds, 22 by hanging, 68 by drowning, 63 by burns and scalds, 131 by fractures and contusions.”

The returns from the country districts are generally satisfactory, but both small-pox and scarlet fever appear to have been prevalent, and fatal in many localities.

An elaborate and interesting meteorological report of the quarter is appended by Mr. Glaishen, from which we learn that the changes of the temperature were frequent and great, and that the amount of electricity in the atmosphere was small, “many days together having passed without the instruments at Greenwich being affected.” Thunder storms, however, occurred on several occasions at Whitehaven, and were also observed at different places in the counties of Cumberland, Lancashire, Durham, Devon, Cornwall, Essex, and Kent. These facts are of some interest taken in connection with the season of the year, and the views which have been put forward by certain observers, on the deficient state of the atmospheric electricity during the prevalence of cholera. The report notices the unusually frequent exhibitions of the *aurora borealis*, and in particular the splendid one of November 17th. On all these occasions the magnetic instruments were more or less disturbed.

Proceedings of Societies.

BIRMINGHAM PATHOLOGICAL SOCIETY.

November 2nd, 1848.*

W. C. FREER, Esq., in the chair.

TYPHUS FEVER; DIARRHŒA: ULCERATION OF THE ILEUM AND CÆCUM.

Dr. Fletcher narrated the following cases:—

Harriet Jones, aged 15, a servant, was admitted into the Birmingham General Hospital October 14th, 1848. She had been living in Dale End, had had a cold, and had been feeling unwell for a week past. During the last day or so, diarrhœa had come on every half hour; she had shivering fits, and complained of pains all over the belly. R. Confect. Aromat., dr. ij.; Tinct. Opii, m. xi.; Mist. Cret., oss. M. Sumat, oz. j., quarta quaque hora. Capt. Pulv. Cretæ cum Opio, gr. x., nocte manque.

16th. Diarrhœa has subsided; she feels better; but little abdominal tenderness. Ordered three glasses of wine daily. Rept. Pulv. ad gr. xx., si opus sit. R. Ammon. Sesquicarb., scr. ij.; Mist. Camph., oz. viij. Sum. oz. j. quarta quaque hora.

21st. Typhoid condition has the last day or two been marked. There has been no return of the diarrhœa. This morning she appeared better, and complained of no pain. She died in the after-part of the day.

Post-mortem examination, October 24th.—Thorax:—The pleuræ were free from adhesions; the lungs were generally congested; the lower lobe of the left lung was in the condition of the first stage of pneumonia; the heart healthy. Abdomen:—The liver was pale in colour; the kidneys appeared natural; the spleen was larger than usual; pancreas healthy; towards the lower part of the ileum numerous small typhoid ulcerations existed, these ulcerations were round, small, and sloughy in appearance, elevating and infiltrating the mucous surfaces, around the solitary glands, and the glands of Peyer; in the cæcum the number of these ulcerations was increased, and around there was deposited a considerable quantity of dirty, sloughy, and typhoid matter; no ulcers existed in any other portion of the large intestines.

TYPHUS FEVER: ULCERATIONS OF INTESTINES.

Maria Burgess, aged 15, a servant, was admitted into the Birmingham General Hospital September 20th, 1848, with diarrhœa every half-hour; hot surface; quickened pulse; red dry tongue. Was taken ill three days before with shiverings and headache; lived in service in New John Street, West; previous health good. R. Mist. Cretæ, oz. viij.; Confect. Aromat.; Tinct. Opii, m. xxx. M. Sumat oz. j. post singulas liquidas dejectiones. Two glasses of wine, and beef-tea, daily. Her natural disposition appears to be fretful; this, added to her present condition, renders her more than ordinarily irritable.

21st. R. Ammon. Sesquicarb., scr. ij.; Mist. Camph.,

oz. viij. M. Sumat oz. j. quarta quaque hora. Four glasses of wine daily.

In the course of a few days her febrile symptoms began to diminish, diarrhœa had in a great measure subsided, the skin became less dry, and she showed more placidity of mind, her sleep at night was disturbed.

25th. Having vomited several times during the night the wine was directed to be diminished to two glasses daily, with a continuance of other remedies. Subsequently to this for two days the wine was altogether omitted. She is more fretful, wanders at times, and cries out frequently during the night. Tongue brown and dry, and teeth and lips covered with sordes.

October 5th. The same condition has continued, varied by occasional diarrhœa; she has never complained of, or seemed to suffer pain about, the bowels on pressure. R. Acidi Hydrochlor. Dilut., oz. ss.; Decoct. Cinchon., oz. xij. M. Sumat oz. iss. ter die. Four glasses of wine daily. Delirium during the day and night has been the last few days almost incessant.

7th. Repetantur remedia. Seven glasses of wine daily.

9th. Died.

Dissection twenty-four hours after death. External appearance of body showed emaciation. Head:—The cerebral membranes were slightly congested; substance of the brain natural; slight effusion existed at the base, none in the ventricles. Thorax:—Lungs healthy, presenting evidence of marked static congestion; heart healthy. Abdomen:—Liver somewhat paler than usual; spleen enlarged, congested, and friable; the pancreas appeared healthy in itself, but attached to it, and each about as large as a filbert, were two apparently enlarged glandular substances, containing in their interior a tubercular-looking matter; kidneys slightly congested; the œsophagus at its upper part presented a dusky redness; throughout the entire course of the ileum, cæcum, and large intestine, as far as the sigmoid flexure of the colon, numerous typhoid ulcerations existed, (in the cæcum they were most abundant,) the mucous membrane around the ulcers being infiltrated and sloughy, and covered by a copious deposit of typhoid matter.

LARGE OVARIAN CYST.

Mr. Brindley presented a large ovarian cyst, and gave the following account of the case:—

Mrs. B., aged 43, of short stature, light complexion, married at 22, and bore children rapidly, but usually had good health; dates her disease eleven years back, when after the birth of her sixth child,—a breech-presentation,—her abdomen continued large, and was in the same state after her last confinement, two years subsequently. From this period she slowly increased in size, her general health and activity remaining unimpaired for some years; at length she grew so bulky, that she could no longer attend to her occupation, that of a green grocer. She kept her bed for three years before her death.

In October, 1846, she had become much emaciated, was very feeble, and suffered a good deal from abdominal

* Continued from page 79.

pains. Her great bulk caused her much inconvenience, and bed-sores threatened to form. By the direction of Dr. Fletcher she was then tapped. Previous to the operation she measured, from spine to umbilicus, on the left side, two feet eleven inches; on the right side, two feet seven inches; from ensiform cartilage to umbilicus, two feet; from pubes to umbilicus, one foot six inches. Nine gallons of fluid were removed, and the cyst was nearly emptied. Some small secondary cysts or tumours could now be felt, apparently within the one emptied. The fluid was dingy-yellow, thick and glairy, and contained myriads of small sparkling crystals, which were shown under the microscope to be tables of cholesterine. The density of the fluid was 1020, and in 1000 parts it contained 45 of solid matter. She bore the operation well, and afterwards improved in condition and appearance. Up to this time she had menstruated regularly and profusely, but the catamenia did not afterwards appear. The urine was usually scanty, not more than twenty ounces *per diem*.

She was tapped again in May, 1847, but on this occasion four gallons only of fluid were removed, in consequence of an accident with the canula. In March, 1848, the cyst was punctured, and thirteen gallons were taken away. In September last the abdomen became painfully distended, and its dimensions were considerably larger than on any former occasion. She had become much emaciated, was very feeble, and had an anæmic appearance. On the 12th fifteen gallons of fluid were drawn off by tapping, but on account of her state the cyst was not more than half emptied. Towards the close of the operation several ounces of blood escaped through the canula, and also from the puncture when the canula was withdrawn, proceeding probably from one of the numerous enlarged veins of the abdominal parietes. She rallied imperfectly, and in a few days was attacked with symptoms of inflammation in the cyst. The abdomen filled rapidly, and she became exhausted and emaciated to the last degree, yet lingered to October 14th, when she died. She had been a dispensary patient for years, under the care of Dr. Fletcher, Mr. Blount, Mr. Shaw, and latterly Mr. Hill, as surgeon of the district, took charge of her case.

Autopsy eighteen hours after death.—Extreme emaciation; abdomen of immense size; lower extremities œdematous and there was also infiltration of serum into the subcutaneous and subserous cellular tissue, in the depending parts. The walls presented some other remarkable changes, consequent on the distension of their tissues; their subcutaneous veins were stretched and dilated into large sinuses, the size of the superior longitudinal sinus of the dura mater, feeling like gutters hollowed out in the hard surrounding structure; the muscular substance, forming the parietes, had entirely lost its red fleshy appearance, and in its place was a thick yellowish-white fibrous structure, bearing a close resemblance to the muscular tissue of the uterus. The peritoneal sac was enormously distended; it contained within its true cavity between two and three gallons of a dark thick glairy fluid; this fluid occupied chiefly the upper part of the sac

of the peritoneum, between the large cyst and the diaphragm, also between the posterior part of the cyst and the subjacent viscera. The ovarian cyst (it was the left,) filled the abdominal cavity from the pubes to the ensiform cartilage, imperfectly overhanging the front of the pelvis, and resting on the thighs, and laterally extending much beyond the ilia. It was closely and firmly adherent to the parietal serous membrane, requiring considerable force to separate them, for which, along the linea alba, the scalpel was necessary; it did not adhere to the adjacent viscera, except to the lower edge of the great omentum. The diaphragm, with the liver to which it adhered, was pushed high up into the thorax, together with the heart and lungs. The cyst contained thirteen or fourteen gallons of clear, limpid, reddish-brown fluid, in which an abundance of soft white flakes floated, or had subsided to the bottom. Its walls were thick, firm, consisting of three coats—a peritoneal, a fibrous, of considerable strength and density, and an inner serous membrane, the surface of which was lined with a layer of soft white albuminous matter. Attached to this surface, at its lowest part, were several tufts or projections of soft membranous structure, apparently the remains of small secondary cysts (probably enlarged Graafian vesicles,) which had burst into the general cavity; a few of them were unbroken; one was of the size of a kidney, and consisted of a number of transparent vesicles or cells, filled with clear fluid, and enclosed in a dense membrane; there was also a large pouch, projecting beyond the general outline of the cyst, distinguished from it by the thickness of its walls, and partly separated by a thick fold or duplicature of its coats. A large quantity of lymph, the result of recent inflammation, and a red and congested state of the lining membrane, were also noticed in its lower portion. The uterus measured full four inches in length, and was drawn up as high as the lower lumbar vertebra. This elongation had taken place in its neck, so that the orificium uteri internum occupied a position nearly midway between the os externum and the fundus, thus giving to the uterine cavity the figure of an hour glass. The left Fallopian tube was very large and elongated; its cavity was the size of a common quill, and it lay embedded in the walls of the cyst, covered by peritoneum, under which its outline could be readily traced, as well as that of its fimbriated extremity. The opening into the uterus was wide and trumpet-shaped, the uterine cavity appearing continuous into it. On the opposite side the communication between the uterus and Fallopian tube could not be traced. The right ovary was also diseased; it was a thin semi-transparent vesicular sac, filled with fluid. The liver was small, very soft, and friable; its peritoneal investments and ligaments opaque and thickened, and loosely adherent to the parenchymatous structure. The gall-bladder was full; the bile nearly black, thick, and ropy. Spleen pale and semi-fluid, its serous covering thick and opaque, and covered by a layer of false membrane; pancreas, stomach, and small intestines, healthy. The colon filled with scybala, almost to the cæcum, an obstacle to the free passage of its contents being evidently occasioned by pressure

of the cyst on the gut, as it passed over the brim of the pelvis. The rectum was empty. Kidneys small, pale, soft, and granulated, both on the surface, and internally, where the morbid process had extended over nearly the whole of the pyramids, destroying their normal appearance.

Fluids:—1st. Ascitic, specific gravity .. 10.20
2nd. Cystic ditto .. 10.10

The first had an oily or glairy appearance, owing to the presence of myriads of the tubular crystals of cholesterine, as verified under the microscope. This fluid also deposited a much larger amount of albumen by nitric acid.

SHEFFIELD MEDICAL SOCIETY.

Fourth Meeting.—Nov. 16, 1848.

The President, Dr. BARTOLOME, in the Chair.

CHOREA.

Dr. Elam read a paper on chorea. The disease now known by the name of chorea seems to be perfectly distinct in its nature from that to which the name chorea or chorea Sancti Viti was originally applied; very little is known of the latter by practical experience in the present day. It was a much more formidable disease, and frequently fatal, but we have no records by which to ascertain its pathology. The cases to be related are all of the modern chorea. Cullen's account also differs from the present type of the disease in several particulars; with regard to the voluntary nature of the actions, which should rather be described as automatic, the too prominent limitation of the convulsions to one side, and the comparison of them to the gestures of actors. Sydenham's description approaches more nearly to the present type.

Dr. Elam related a case bearing upon the question as to how far these motions may be considered voluntary, and regarded the case as pointing to the probability that they are rather of an automatic character, similar in nature to the action of the respiratory muscles.

E. D., 9 years of age, had been suffering from chorea for three weeks. When sitting up in bed, taking her breakfast, the peculiar distinction between the voluntary and automatic motions was remarked, for whilst eating, the right arm acted regularly in carrying the spoon to the mouth, whilst the left arm and both legs were violently convulsed, yet not a drop of the food was spilled; but when the girl, instead of eating instinctively, as it may be called, was told to do anything with the right hand, or asked to give her hand, she did it in the jerking irregular manner so characteristic of this affection.

The effect of music upon the ancient form of St. Vitus's dance seems to indicate that whilst volition has but little influence in itself in controlling the irregular actions of the muscles, yet by external agencies acting through the senses, an instinctive modification of these actions may take place, and if persevered in, the habit may be broken altogether. Another peculiarity in these motions is that in defiance of their apparent irregularity, there is a sort of rhythm or order,—a series of actions recurring with greater or less constancy. This is most manifest in the milder forms. In some cases it is confined to a periodical

twitching of some one or more muscles of the face or eye-balls. In one case both eye-balls were turned so far upwards and laterally, as almost to hide the iris. This, and a corresponding twitch of the orbicularis, were the constant and only symptoms, and recurred with tolerable regularity every forty seconds. As the cases become more violent, the regularity of the motions becomes less evident, one class of spasms interfering with and modifying the others; in one very violent and fatal case, however, the recurring character of the convulsions was evident almost to the last.

For the production of these motions, if they are acknowledged to be of this character, there must be a stimulus acting upon the extremities of an excito-motor nerve, and the impulse reflected from the motor centres upon the muscular system. In health, stimuli of a certain character are constantly applied to the extremities of these nerves. To produce disease, either the stimulus must be increased in intensity, or the extremities of the nerves must be in a more irritable condition, and to the latter cause must the production of chorea be almost invariably attributed. In almost every case the cause must be looked for in some local or general excitability (perhaps from irregular distribution of blood,) in the extremities of the excito-motor nerves, compelling them to respond in a more vigorous, and consequently, irregular manner, to the ordinary physical agents. It seems probable, too, that this excitability is almost exclusively manifested in the alimentary canal, the uterus, or the skin.

Dr. Elam then related several cases in which the alimentary canal was almost exclusively involved, and stated, as a general rule, that when the stimulus is in excess the spasms are tonic, giving rise to *cramp*, but when the excitability of the nervous extremities is increased, they are clonic. The next case was one of a more complicated character dependent on irritability of the peripheral nerves of the intestines.

E. S., aged 8, suffered from the usual symptoms of chorea. Purgatives and carbonate of iron were prescribed, and though the tumid bowels were relieved, the jactitations were only rendered more violent. Every variety of tonic was tried, and each successive change in the medicine seemed but to aggravate the characteristic symptoms. The pupils having become more dilated, and more insensible to light, with pain in the head, a blister was applied to the neck, and the result was a great aggravation of the symptoms. At last mercurial liniment, with opium, was rubbed over the abdomen, and the improvement was immediate. Tonics were now given with good effect, and the recovery was complete.

Dr. Elam next detailed several cases connected with affections of the uterus. These cases generally occur when the function of menstruation is instituted. There are, however, many striking exceptions to this rule. The following is an instance:—

A little girl, 8 years of age, was attacked with symptoms of inflammation of the uterus. There was pain in the hypogastric region, and a purulent discharge from the vagina, though no mischief could be detected in the vagina itself. A rather firm tumour could be felt just above the pubes, which seemed to be the uterus enlarged;

treatment directed to this part removed the tumour, the discharge, the pain, and the chorea.

Two fatal cases were mentioned, they were of the uterine nature, about the same age, and with very similar symptoms.

J. C., aged 15, ill two weeks. When first seen the convulsions were very violent. She could give no account of herself, and her friends could give little more. It was impossible to ascertain whether any local affection existed. The agitation was so extreme, the distress of the countenance so terrible, that an experienced surgeon said, "If I must die of a convulsive disease, let it be tetanus rather than this." This continued quite unchecked by treatment for ten days, when she died.

The *post-mortem* appearances were peculiar, but confined to the brain, spinal cord, and uterus. All the vessels on the surface of the brain and spinal cord were extremely gorged with blood, but this seemed to be rather an effect than a cause of the violent and long-continued agitation. The apparent origin of all the mischief was found in the lining of the uterus, which was extremely congested, and in one or two places a minute drop of blood had oozed out, indicating that the function of menstruation was just on the point of being set up, and if the patient could, as Dr. Watson suggests in fever, have been kept alive a little longer, she would ultimately have recovered. The system was on the point of relieving itself, but nature gave way in the effort.

The second fatal case was very similar to the one just detailed, both in the symptoms and *post-mortem* appearances.

In conclusion, Dr. Elam noticed the great similarity between chorea and tic, both as to their causes and the plan of treatment most successful in both. One attacks the motor and the other the sentient nerves; both are chiefly dependent on derangement of the intestinal or uterine functions,—both are generally diseases of debility,—both relieved by tonics,—and both are almost incapable of relief by narcotics.

NOTES ON AMERICA: ITS MEDICAL SCHOOLS AND ESTABLISHMENTS.

By EDWARD HUMPAGE, Esq., M.R.C.S., Bristol.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Having, during the last autumn, spent some time in the United States, I thought a short account of what I saw there, in the professional world, would not be disagreeable to your readers. My notes are desultory, but they have the merit of being made on the spot.

In my professional intercourse with our transatlantic brethren, I can bear abundant testimony to the truth of Dr. Wood's sentiments, as recorded in the Journal of September 6th, at the Bath Association dinner, where he says,—“I may venture to say that in our land (the United States,) there prevails, almost universally, among the well informed, a kindly disposition towards the mother country.” This feeling exists

most remarkably among the members of the medical profession, among whom I was received with the greatest cordiality and brotherly kindness. Professor Valentine Mott, of New York, and Dr. Channing, Professor of Midwifery, at Boston, were foremost in their attentions, and I shall ever feel towards them lively impressions of regard and esteem.

I propose giving you a short account of the medical schools, and the profession generally in New York, and afterwards some account of the great quarantine establishment at Staten Island, and conclude with my visit to Albany and Boston, in both of which cities are thriving medical schools.

I am, Sir, yours faithfully,

EDWARD HUMPAGE.

NEW YORK.

In this splendid city there are two medical schools. The larger one called the University Medical School, is a noble edifice, with a front of hewn granite, 75 feet long. Its portico is supported by four splendid granite columns. The buildings contain three spacious lecture-rooms, with a reading-room, library, and museum, the latter not as yet very rich in specimens. The number of pupils is about 400. The winter session begins in October, and ends in February. Valentine Mott, and Granville Sharpe Pattison, are the stars of this school, and their pupils come from all parts of the Union, and also from South America. The remarkable mixture of Anglo-Saxon, genuine Yankee, and pure American expression of countenance, gave me at once the feeling that I was not in Old England; and this was increased by the singular number of men in middle life which were to be seen among the pupils,* diligently noting down the practical sayings and simple prescriptions of Professor Mott.

I had the pleasure of hearing several of the introductory lectures, which are delivered before an audience of six or seven hundred persons, including many of the higher class of citizens.

The arrangements for lectures and dissections are pretty much the same as our own, but the fees very much lower. I had the satisfaction of being present at Professor Mott's weekly public clinique, which is conducted by him in the anatomical theatre of the school, and to which all the pupils are admitted.

This worthy professor gives his advice to all who come, commenting on the patient just as the case presents itself. We had on one occasion, a young Irishwoman: her case was hare-lip, and a very favourable one for operation. “Ah!” said he “why didn't you get your beauty improved in old Ireland?” “An' faith,” said she, “they did not laugh at me there, but here they do. Please, your honour, to cure me.” In a very short space of time the scissors and ligatures were prepared by Dr. Mott's son-in-law, Dr. Van Buren, and

* This is explained by the fact, that many men in the States having made some money by farming, or in trade, resolve to become *doctors*, and forthwith enter the ranks of pupils, hear lectures, perhaps, for two sessions, and then go into the “Far West” and practice physic.

the patient being seated, the operation was commenced by separating a portion of the lip from the malar bone; then the edges were cut with the scissors, the edges brought together, and two sutures (he much prefers them to pins,) applied, over which was placed a *single piece* of adhesive plaster, shaped to the part, the ends reaching to the anterior edge of the lobes of the ears, thus making a most secure support.

The operation was very neatly performed, the labial arteries being compressed by the assistant; not a tablespoonful of blood was lost. The various steps of the operation were commented on to the class, the professor remarking that great care must be taken at the time of the removal of the stitches, (on the sixth or seventh day,) to support the part well with the finger and thumb, until another piece of adhesive plaster could be applied. This, he remarked, in children, was most essential, and if neglected would lead to a complete failure.

After this operation Dr. Mott exhibited the amputated leg of "a brother chip" as he facetiously styled him, who unfortunately fell from a height the day before, and to whom the Doctor was summoned. He found a compound dislocation of the right ankle, *without much contusion*. Amputation was considered necessary. I had an opportunity of telling Dr. Mott afterwards, that we in England should have attempted the preservation of the limb, and that it was generally successful. His reply was, "I know it; but here we get tetanus almost invariably, and then death is inevitable." Of course I could make no reply to that. The case went on very well, as I found by subsequent enquiries.

I saw several cases of spinal disease in children, from two to six or eight years old; they are by no means uncommon, and are regarded as depending on sub-acute meningitis of the arachnoid envelope, producing paraplegia. The treatment consists in the occasional application of three or four leeches, followed by small blisters and strychnine. In other cases they find tonics, as iron, quinine, or iodine, useful, with the local application of nitric acid, just to raise the epidermis, but these cases are very intractable, and their treatment unsatisfactory.

Professor Mott concluded the morning's clinique by some excellent observations on the conduct of pupils at the commencement of their career, urged the necessity of uprightness of conduct, and kindness to the poor. "I, (said he,) was content to go for a long time, into the cellars of the poor, before I ascended the marble steps and stood under the porticos of the wealthy, and you must do the same; there is no royal road to the high places of our profession, begin humbly and rise gradually."

(To be continued.)

General Retrospect.

ANATOMY AND PHYSIOLOGY.

BLOOD CORPUSCLES OF THE HUMAN EMBRYO.

Mr. Paget has examined the blood of a fœtus of four weeks old, which is the earliest period at which it has been submitted to microscopic enquiry. The great majority of the red corpuscles presented a circular outline, and as they rolled over appeared spheroidal and vesicular. Their surfaces were smooth, and as they dried, portions of their edges were incurved and folded towards their centres. They were apparently more deep-coloured than in adult blood. The nuclei were circular, with well-defined dark outlines, and darkly nebulous, as if granulated. All the corpuscles were nucleated; some contained two nuclei, and were ovoidal, and larger than the rest.

The measurements of the spheroidal corpuscles were from 1-2100 to 1-2800th of an inch in diameter; that of the nuclei from 1 3700 to 1-4500th. Of the bi-nucleated cells the measurements were 1-1500 by 1-2300th of an inch.—*Medical Gazette*, February 2nd.

PATHOLOGY AND PRACTICAL MEDICINE.

ABSCESS OF THE PITUITARY BODY.

The following uncommon case is reported by Dr. Heslop:—

J. H., an engineer, of active habits, was attacked with acute headache after dancing all night on February 10th, 1848. Previously to this he had exhibited a remarkable tendency to sleep; if he sat down he would immediately fall into a heavy slumber, but the sudden acute pain was the first symptom which attracted attention. After using some domestic remedies the pain was much relieved, but it returned in consequence of error in diet. He became wild and restless, or at other times would lie in a state of semi-stupor, silent, and indifferent to everything. He on one occasion stripped himself and evacuated the bowels in the centre of his room. Mercury was now given, and leeches and blisters applied, but in spite of this he fell into profound coma, and the pulse became intermittent and fell to 40 in the minute. Wine was now given freely, and he rallied so much that recovery was confidently expected. Two symptoms remained, of bad import: one of them was an almost total loss of memory, the other loss of power over the sphincters. He was, however, well enough to go to Dublin, where he was placed under the care of Dr. Stokes. The progress of the disease was marked by emaciation, and further declension of the memory; the orbicularis of the right eye also became paralysed, the acute pains in the head continued to the last. The immediate cause of death was an obscure attack of pleurisy in September.

Post-mortem examination. Body emaciated; membranes of the brain healthy; at the second pair of nerves was found a soft dark grey tumour, the size of a walnut, occupy the site of the pituitary body, and extending posteriorly and laterally; it contained a dark red purulent fluid. It filled up the entire outer peduncular space, extending backwards to the pons Varolii, and

protruding forward to the fissure of Sylvius. The crura cerebri were pressed outwards. Underneath the tumour a quantity of thin reddish fluid was noticed. The bones which formed the middle cerebral fossæ were covered with small sharp osseous processes.—*Dublin Quarterly Journal*, Nov. 1848.

ATALECTASIS PULMONUM

The author of this communication, Dr. Friedleben, attempts to shew that atelectasis (the fetal state of the lungs,) is always produced by some obstacle to the complete establishment of respiration. He maintains that this pathological condition is not confined to new born children, but is also met with in infancy.

The anatomical characters of the lesion consist of a brownish colour of a portion of lung which has not respired, and is distinctly separated from those which have admitted air. The brown portions are hard, and do not crepitate, and sink in water. They can be artificially inflated, and in that case closely resemble healthy lung. Amongst other alterations are observed an abnormal quantity of mucus in the bronchial tubes, the foramen ovale open, the presence of coagula in the cavities of the heart, friability of the liver and spleen, injection of the cerebral vessels, and in some instances true apoplectic effusions.

The diagnosis of atelectasis pulmonum is easy, if we compare the physical with the rational signs. When the disease has lasted a few days, cyanosis always declares itself, less in consequence of the patency of the foramen ovale, than as a result of deficient hæmatisation. The author notices all the circumstances which modify the progress and termination of the malady. The latter is not always immediately fatal, but in some cases persists to infancy. It is to an attack of bronchitis in the fetal state, that this persistence is, in the author's opinion, to be attributed, by which the bronchial ramifications are impeded, and the entrance of air prevented.

The anatomical differences in this case between the sound and diseased lung become very marked, the latter appearing of a dirty violet colour, like that of the cortical portion of the kidney; the pleura covering it is also thicker, and insufflation is difficult or impossible. The consecutive lesions most frequently observed are dilatations of the right ventricle, amplification of the foramen ovale, effusion into the pericardium, œdema of the lungs and cellular tissue.

The lengthened details into which the author enters respecting the anatomical appearances in atelectasis have chiefly reference to the diagnosis from fetal pneumonia, and are intended to prove that it is essentially the same lesion which French writers have described as *carnification* of the lung.

The author thinks that he has been able to distinguish three forms of the malady. In the first, the infant has mucous rales and cough immediately after birth, but it sucks well; later, paroxysms of coughing come on, with threatened asphyxia, and a livid colour of the face. These attacks end in abundant vomiting, and the child then resumes its wonted appearance. There is a dull sound on percussion, over several points of the chest, with a bronchial souffle; in the other

portions of the lungs, mucous rales and puerile respiration are heard. After a short time the heart begins to beat irregularly, then the impulse becomes more feeble. At the same time, the lips and extremities become hard, the features swollen, and the respiration embarrassed. The fits of coughing also become more frequent and prolonged, œdema of the lungs follows and death ensues, with symptoms of cerebral effusion.

The second form is characterized by less violence at first, but is speedily complicated with symptoms of pneumonia, and death ensues even more rapidly than in the preceding.

The third form is the most rapidly fatal. The infants at birth have a slight cough; but fever is suddenly lighted up and is accompanied with symptoms of follicular enteritis. In this form the infant appears to die of exhaustion.—*Archiv für Physiologische Heilkunde*

CONCLUSIONS RESPECTING THE MODE OF PROPAGATION OF CHOLERA IN RUSSIA, 1847-48.

Dr. Frettenbacher, of Moscow, in an elaborate statistical report of the progress and ravages of cholera throughout the Russian Empire, during the last two years, gives the following general conclusions as the result of his observations on the subject of its propagation:—

1. Intermittent fevers had prevailed throughout the whole extent of the Empire, previously to the appearance of the cholera. In 1846 they had assumed in many places an epidemic character. In 1847, when the cholera appeared these fevers ceased, and they reappeared as the cholera declined.

2. The cholera was preceded, almost invariably, by disorders of the digestive organs and intestinal canal. These derangements increased with the appearance of cholera, and decreased in severity as it disappeared. They prevailed throughout the whole extent of Russia in Europe, even where cholera was not present.

3. The cholera followed the course of large rivers and the chief lines of human intercourse. Prevailing winds had no influence on its progress.

4. When the cholera appeared in places out of its principal route, it was generally found to have manifested itself shortly after the arrival of persons from districts where the disease was prevailing.

5. In localities where the cholera was thus conveyed by individuals, it did not always spread as an epidemic, but those only who came in contact with the affected had the disease, and if it did spread epidemically under these circumstances, its progress was very slow.

6. In many places the cholera appeared in an epidemic form, without any communication with infected districts, under the influence of general causes, of which we have as yet no satisfactory explanation.

7. The cholera propagated itself especially in low situations, in unhealthy and confined dwellings, where the inhabitants were previously debilitated by disease, intemperance, and other depressing causes.

8. Some localities which, from accidental circumstances, were carefully isolated, such as large establishments, and even entire villages, completely escaped the visitation.

The preceding facts prove that this disease, originally epidemic, may become energetically contagious, or, in other words, communicable from man to man.—*Gazette Médicale*, Jan. 13, 1849, and *Medical Gazette*, February 2nd.

TREATMENT OF MALIGNANT CHOLERA.

The following comparison of various modes of treating malignant cholera, is taken from a review of several recent writings on this disease in the *Monthly Journal*, 1849:—

Bloodletting. In reference to this the evidence is conflicting. It has been employed with alleged benefit in all stages of the disease in this country and in India. In the early stage it has been effectual in relieving the feeling of oppression on the chest. Its effect on the mortality is not evident. Dr. Robertson, in his statistical account of the cholera in Edinburgh, during the present epidemic, states that he has in many instances prevented collapse by this measure.

Stimulants. According to Mr. Ross's tables, stimulants given to any extent appear to have been injurious.

Opium. There seems no reason to doubt its efficacy in the early stage, but according to the tables above mentioned it does not diminish the mortality.

Mercury has not been followed by remarkable success, in this country, excepting in the hands of Drs. Ayres and Peacock, both of whom use it without stimulants. In their experience the mortality was reduced to thirty-one per cent. Dr. Fleming advises the use of a solution of the bichloride, as more readily absorbed.

Tartar Emetic in small doses, with cold water *ad libitum*, has, in the Droitwich Asylum, afforded the largest per centage of cures, the deaths being only four in twenty-four cases.

Injection into the Veins has afforded no satisfactory results.

Chloroform has been used by inhalation in thirty-seven cases. The results are inferior to those witnessed in the Droitwich Asylum, but superior to the general results exhibited in Ross's tables.

NUX-VOMICA IN THE DIARRHŒA OF EXHAUSTION.

Dr. Nevins has alluded to the benefit derived from the exhibitions of nux-vomica in pauper patients labouring under exhausting diarrhœa. His formula is:—Alcoholic Extract of Nux-vomica, gr. ss.; Rhubarb, gr. ss.; Saccharine Carbonate of Iron, gr. j.; Blue Pill, gr. ss.; Opium, gr. $\frac{1}{8}$; in a pill three times a day. He attributes the benefit derived to the action of the nux-vomica in stimulating the nervous power of the intestines, and thus enabling their lacteals to absorb the nutriment from the food. At the same time the small doses of blue pill and rhubarb improved the secretions, and the iron acted as a tonic.—*Med. Gazette*, Dec. 15, 1848.

LEMON JUICE IN RHEUMATIC GOUT.

Dr. Owen Rees narrates the case of a girl, aged 18, suffering from rheumatic gout in all her joints, who was treated successfully by lemon juice, in the dose of half an ounce three times a day. In his remarks on the case, he states that he has in many other cases seen

marked and rapid relief from the same plan. He first had recourse to lemon juice from a belief that vegetable acids, from the large quantity of oxygen they contain, contribute to effect the transformation of the tissues generally, and moreover, from the idea that the super-citrate contained in the juice, by its transformation contributed to the alkalinity of the blood.—*Medical Gazette*, Jan. 26th.

SURGERY.

CASE OF CONGENITAL GLOSSOCELE OR HYPERTROPHIED TONGUE.

Mr. Delaney, of the United States navy, relates a case, of which the following is a condensed account:—

Miss F., aged 20, was born with the tongue protruding from the mouth. It had subsequently grown, and at the present date was a disgusting nuisance. She is in health, and has no engorgement of the sub-maxillary glands. The protrusion is upwards of four inches, circumference seven inches, and thickness in the middle two inches; a deep linear fissure occupied the whole length of the dorsum. The protruded portion was quite dark, owing to a number of vesicles filled with blood. The substance of the tongue was extremely hard, and very insensible; it constantly poured out a viscid offensive secretion. The inferior maxilla was natural in form, excepting at the symphysis, where the incisors and canine teeth were separated half an inch, and inclined outwards by the pressure of the tongue. The lower lip was also everted.

After due consideration, amputation was decided upon, and performed in the following manner:—The patient being seated in a chair, and her head supported by an assistant, and her hands secured, the tongue was forcibly drawn forward, and a ∇ incision commenced on the left side, and carried to the median line, and then cut out on the opposite side, thus, with two strokes, excising the part. A formidable jet of blood immediately followed from the dorsal and canine arteries, which required a ligature.

The patient suffered so little pain, that immediately the ligatures were fixed, she ran to a looking-glass to see the effect of the operation. The flaps were brought together and secured by four interrupted sutures. When this was done the tongue was of good shape; the length removed was two inches and three quarters. For nine hours after the operation the tongue remained within the mouth; inflammation and swelling then set in, and caused it to protrude. The only dressing was lint wet with iced water. On the sixth day three of the sutures were removed, and on the twentieth complete union had taken place.

Miss F. soon after chewed her food for the first time with the tongue in the mouth, and it now keeps within the teeth like a normal tongue. The patient is now a comely girl, the teeth having been removed and replaced by artificial ones.—*American Journal of Medical Sciences*, October, 1848.

NEW OPERATION FOR VARICOCELE.

The author, Dr. Gross, has performed this operation eight times; the patients were all young men and recovered without a bad symptom.

The scrotum, previously divested of hair, is rendered tense by grasping it behind with the left hand. A vertical incision, an inch in length, is made over the anterior part of the tumour, down to the enlarged veins, which are then carefully isolated from the duct, artery and nerves. This is the first part of the operation. The second consists in passing a short thick needle underneath two or three of the larger trunks, and winding around it a stout thread, either elliptically or in the form of the figure 8. The ligature is drawn tight, and the operation is concluded by closing the wound with sutures or plaster; the patient is now put to bed, and light diet enjoined. At the end of twenty-four hours the blood is sufficiently coagulated in the obstructed veins to justify their division, which is then done with a bistoury, and the needles are removed. The patient may usually be permitted to sit up in four or five days.

The advantages of this operation are its simplicity and facility of execution, its freedom from pain and hæmorrhage, the certainty of avoiding the artery, nerves and duct, and the rapidity of cure.—*American Journal of Medical Sciences*, October, 1848.

PHARMACY.

SOLUTION OF CAMPHOR IN CHLOROFORM.

Messrs. Smith, chemists, of Edinburgh, have made known that camphor will dissolve in chloroform in almost any proportions. [We have verified this, and now frequently prescribe a solution, ten drops of which contain three grains of camphor. The discovery enables us to give larger doses of camphor in solution than was previously possible.—Ed.]

TOXICOLOGY.

POISONING BY CHLORIDE OF ZINC.

Dr. Stratton narrates two cases of poisoning by a solution of chloride of zinc, taken under mistake for whisky. The symptoms were those of irritative poisoning. The first case recovered spontaneously; in the second he administered soap-suds as an antidote, with effect. He suggests this, or a solution of carbonate of soda or potash, as the proper antidote in such cases.—*Edinburgh Medical and Surgical Journal*, Oct., 1848.

THE LATE ACTIONS AGAINST THE MIDLAND RAILWAY COMPANY.

COX v. MIDLAND RAILWAY COMPANY.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I beg to offer you my best thanks for the interest you have taken in this case. The enclosed correspondence will be an answer to your question (page 76, line 26)—“Now, we beg to ask, first, whether the innkeeper, &c.”

The innkeeper has not been paid; the Surgeons have not been paid; and, in defiance of public opinion, the

Company have applied to me for *their costs* in the action, although a verdict was given in my favour by Mr. Justice Maule, at Warwick.

Yours, obliged,

WILLIAM SANDS COX.

To the Editor of *Aris's Gazette*.

SIR,—Having observed in the *Times* of Tuesday last, and in the *Birmingham Journal* of to-day, a letter from Mr. Bell, Secretary of the Midland Railway Company, which contains matter directly opposed to facts; and as I happen to be in possession of letters from my Counsel (Mr. Hayes,) which support my previous and present statements, I beg to send copies to you, trusting you will be good enough to give them publicity.

At the late trials the Company did not attempt to deny negligence. They did not, either at Warwick or in the Court of Exchequer, pretend that they had paid the Doctors or Innkeeper, but they set out with saying that the charges were unreasonable, and finding that that ground would be cut from under them, they, to the surprise of every one, resorted to the desperate defence that the calling-in of the Doctors and employment of the Innkeeper were contracts, which required the seal of the Company to be binding.

Mr. Bell has thought proper to advert, with no little censure, upon my conduct in this matter; but after the letters from my Counsel are laid before the public, I shall with confidence leave the matter with them to judge if my conduct has been such as Mr. Bell states, or “calculated to carry anything but a correct notion either of the facts of the case or of the conduct and motives of the Directors and Officers of the Company.”

I am Sir,

Your obedient servant,

GEORGE CHILWELL.

Old Square, Birmingham, Feb. 3, 1849.

Temple, September 29, 1847.

DEAR SIR,—I shall not have an opportunity of seeing Mr. Macaulay for some time to come, but will mention the subject of your note on the earliest occasion.

I don't think Mr. Davies will be affected by Higgins's verdict, as it was clear he never gave credit to Higgins, but attended in consequence of being sent for by the servants of the Company. It was understood between Mr. Macaulay and myself that the Company would settle for medical attendance, provided such charges were reasonable, with regard to the situation in life of the patient.

I remain, dear Sir, yours truly,

G. HAYES.

G. Chilwell, Esq., Solicitor,
Old Square, Birmingham.

Temple, November 13, 1847.

Higgins and the M. R. Company.

DEAR SIR,—At the trial it was understood between Mr. Macaulay and myself that the amount agreed to be paid to Higgins was *exclusive of Medical and Surgical charges*. Mr. Macaulay stated that all reasonable charges of this nature would be paid by the Company; but he did not say they would pay the particular bills referred to by you, but on the contrary stated that the Company had complained of the amount of some of the bills sent in as excessive, considering Higgins's situation

in life. The question of medical charges was one with which Mr. Whitehurst and I considered we had nothing to do as the counsel for Higgins, for it appeared that the medical men had been sent for by the agent of the Company, and that they had given credit to the Company, and not to Higgins.

I should conceive the best way would be for the medical men to refer the Company to the arrangement and admission made by Mr. Macaulay at the trial, that the Company would pay the medical charges. The Company, or their solicitor, will then refer to Mr. Macaulay for information, and his answer will come in a regular way before the directors. The directors, on receiving this answer, will no doubt admit their liability to pay medical charges, but the question of *amount* is a matter entirely to be settled between the medical men and the Company. I have not yet had an opportunity of seeing him with respect to Higgins, but will do so in a day or two.

Yours truly,

G. Chilwell, Esq., Solicitor, G. HAYES.
Old Square, Birmingham.

Temple, January 10, 1848.

DEAR SIR,—The medical men's charges is a matter between *themselves* and the Company, and to whom I have always *understood they gave credit*. This was the reason why I considered that it was proper to omit the mention of it in the memorandum of settlement, which was entirely a matter between *Higgins* and the Company, and the medical men not having given credit to Higgins he had nothing to do with their claim. You are not acting prudently, or indeed correctly, in corresponding with the Company as if it were an affair belonging to the action of *Higgins and the Midland Railway Company*, as their letters, and I presume your's, are entitled.

If the medical men have a good case by way of evidence to fix the Company, (as I was informed,) they may sue the Company as their employers, but I have no means of knowing whether this is the case, and cannot advise on such a point by letter, having neither time to write nor any facts to enable me to judge.

I remain, dear Sir, yours truly,

G. Chilwell, Esq., Solicitor, G. HAYES.
Old Square, Birmingham.

Extract from a Letter of John Suckling, Esq., Solicitor to the Plaintiff, addressed to Aris's Gazette.

"In the first place, the accident happened through gross negligence on the part of the Company; this has not been denied either at Warwick or at Westminster. It has been proved over and over again, that the Company's servants sent for Dr. Davies, from Coleshill. The first question Dr. Davies asked the messenger was, 'who sent for him; and the answer was, 'the Station-master.' On this Dr. Davies went to Whitacre. Four medical men attended the man; and, after a consultation, the Station-master at Whitacre attempted to telegraph the Superintendent at Birmingham to send Mr. Sands Cox to join in the consultation. The intense cold and snow having rendered the telegraph useless, Mr. Davies, the surgeon, went to Birmingham for Mr. Cox, and consulted Mr. Needham, one of the Company's chief clerk's there, who fully approved of what had been done, and put on a special carriage for Mr. Cox's accommodation, which, I believe, was taken off at Whitacre, and kept there until Mr. Cox returned. And on two subsequent occasions Mr. Needham sent Mr.

Cox to Whitacre, free of fare, to see how the man was going on.

"Neither Dr. Davies nor Mr. Cox gave credit to Higgins for their services. Mr. Cox knew nothing of Higgins; he trusted the Company. The Company, through their counsel, promised that Mr. Cox's reasonable charges should be paid. His charges have been admitted to be fair, and that they ought to have been paid there cannot be two opinions.

"The defendants appear to estimate the value of a poor man's leg at £100, no matter what his occupation, or whether he has a family or not; but I can tell them that in this case, after the doctors, innkeeper, and attorney had been paid, nothing like that sum would have remained.

"JOHN SUCKLING.

"Birmingham, Feb., 3, 1849."

PRACTISING DRUGGISTS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I wish to make known a fact or two respecting the medical and surgical practice carried on in this city, for it has been said, and, probably, with some approach to truth, that one-fourth of the practice in Bristol is in the hands of the druggists.

A child, one year old, was brought to me on the 31st of January, with the lids of both eyes in a very swollen state. Upon opening them, I found that the cornea of each eye had sloughed completely, and the contents of the globes were escaping.

The mother stated that the eyes had been perfectly sound a fortnight before, but seeing that they were slightly weak, she took it to a druggist in this city, who, after examining the eyes and mouth, told her there was not much amiss, that it probably depended on the teeth, and finished by selling her a bottle of "lotion-water." The child is of course hopelessly blind, but the constitutional symptoms arising from the disease of the eyes have so injured its health, that it appears scarcely likely to live, a termination of the case much to be hoped for.

I have, before now, entered the shop of another druggist here, and found him examining a child's mouth, and prescribing powder; another I have seen paying his daily visits; and within the last ten days, whilst enquiring about the composition of a purgative dose for infants, I have received a lecture from a shop-boy behind the counter, upon the facility with which very young children bear doses of calomel.

It is not on account of the profession, so much as for the sake of the poorer part of the public, that I wish to draw attention to this state of things.

I remain Sir, your obedient servant,

AUGUSTIN PRICHARD.

Red Lodge, Bristol.

February 13, 1849.

Medical Intelligence.

APPOINTMENTS.

Wilbraham Falconer, M.D., has been elected Physician to the Bath United Hospital, in the room of Dr. Daniel, resigned.

John Torry Hester, Esq., has been elected Surgeon to the Radcliffe Infirmary, Oxford, in the room of Mr. C. L. Parker, deceased.

UNIVERSITY OF LONDON.

Number and Average Age of Candidates for Degrees in Medicine, and the Number that have passed the Examinations in each year.

DOCTOR OF MEDICINE.							
No. of Candidates.	No. passed.	Age of Candidates.	Yrs. M.	No. of Candidates.	No. passed.	Age of Candidates.	Yrs. M.
2	1	27	6	2	1	27	6
1	1	29	0	1	1	29	0
7	7	31	1	7	7	31	1
5	5	26	5	5	5	26	5
4	4	25	0	4	4	25	0
2	2	28	2	2	2	28	2
4	4	28	4	4	4	28	4
10	10	27	4	10	10	27	4
11	11	29	0	11	11	29	0
9	9	27	5	9	9	27	5
11	11	30	5	11	11	30	5
74	74	28	2	74	74	28	2
				10 ys. Aver.			
BACHELOR OF MEDICINE.							
First Examination.		Second Examination.					
No. of Candidates.	No. passed.	Age of Candidates.	Yrs. M.	No. of Candidates.	No. passed.	Age of Candidates.	Yrs. M.
25	16			10	9		
1839	1839			20	19		
49	38			21	18		
1840	1840			23	19		
80	50			22	21		
1841	1841			22	20		
32	25			22	16		
1842	1842			17	13		
41	21	23	6	22	20		
1843	1843			14	13		
35	26	22	2	21	20		
1844	1844			24	20		
33	18	23	6	24	20		
1845	1845			22	26		
31	26	24	2	25	23		
1846	1846			22	26		
33	24	22	10	23	25		
1847	1847			23	26		
41	27	23	1	25	1		
1848	1848			4 ys. Aver.			
400	271	16 ys. Aver.					

QUEEN'S COLLEGE, BIRMINGHAM.

Owing to unavoidable circumstances, the decision of the prizes for the last collegiate year was not given till a few days since. At a special meeting of the Council, the following gentlemen were announced as the successful candidates:—

Anatomy and Physiology:—(Medal)—Mr. Thomason, Shiffnal.

Practice of Physic:—(Medal)—Mr. Whittle, Leamington; (Hon. Certificate)—Mr. Moore, Hales Owen.

Surgery:—(Medal)—Mr. Whittle, Leamington.

Materia Medica:—(Medal)—Mr. Blake, Birmingham; (Hon. Certificate)—Mr. Low, Birmingham.

Chemistry:—(Medal)—Mr. Blake, Birmingham.

Midwifery:—(Medal)—Mr. Lane, Grosmont; (Hon. Certificate)—Mr. Stead, Congleton.

Forensic Medicine:—(Certificates)—Mr. Mills, Tipton; Mr. Partridge, Darlaston.

Demonstrator's Prize:—Mr. Moore, Hales Owen.

Warneford Essay:—"On the Articulations of the Human Skeleton." Mr. Lane, Grosmont, (1st.); Mr. Dunn, Birmingham, (2nd.).

Governors' Gold Medals:—Mr. Lane, Grosmont; Mr. Jones, Cleobury Mortimer.

ROYAL COLLEGE OF PHYSICIANS.

LECTURES.

The Gulstonian Lectures will be delivered by Dr. Gull, and commenced on the 16th inst.; the Croonian, by Dr. Conolly, on the 28th; the Lumleian, by Dr. Todd, March 9th; and the lectures on Materia Medica, by Dr. G. Bird, March 21st.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates Thursday, February 1st. :—Oglethorpe Wakelin Barratt, Birmingham; Francis Turner Welby King, Melton Mowbray; Felix Weekes Richardson, Banbury; William Thomas Garrett Woodforde.

OBITUARY.

Died, January 20th, at Canterbury, aged 92, Francis Dalley, M.D., formerly of Stamford.

February 2nd, at Montrose, aged 42, David Burnes, M.D., formerly of London.

February 3rd, at Hornchurch, Essex, Robert Wm. Quennell, Esq., Surgeon.

February 4th, at Madeira, Nicholas George Hobson, Esq., Surgeon, late of London.

February 6th, at Ashburton, Devon, aged 52, John Soper, M.D.

BOOKS RECEIVED.

Essays on Infant Therapeutics, &c., &c. By John B. Beck, M.D., Professor of Materia Medica and Medical Jurisprudence in the College of Physicians and Surgeons of the University of the State of New York, &c., &c. New York, U.S.: Dean. 1849. 12mo pp. 117.

On Infantile Laryngismus, &c. By James Reid, M.D., Physician to the General Lying-in Hospital, and to the Infirmary of St. Giles and St. George, Bloomsbury, &c. London: Churchill. 1849. 8vo pp. 204.

The Borough of Hull, considered in Relation to the Health of its Inhabitants, &c. By Henry Cooper, M.D., President of the Hull Literary and Philosophical Society. Hull: Leng and Son. 1849. 8vo pp. 25.

Return of the Mortality in 117 Districts of England, for the Quarter ending December 31st, 1848.

ERRATA.

Page 43, col. 1, line 15 from the bottom, for "external" read *internal*; line 11 from the bottom, for "pressure" read *presence*.

TO CORRESPONDENTS.

Communications have been received from Dr. Copeman; Dr. Kingdon; Mr. Humphry; Mr. Humpage; Mr. Waldron; Mr. Spooner; Dr. Ballard; Professor Sands Cox; Mr. A. Prichard; Mr. T. L. Walford; Dr. Butler Lane; Mr. Nunneley; Dr. Heaton,

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON SURGERY,

DELIVERED IN THE

MEDICAL SCHOOL OF CAMBRIDGE.

By GEORGE MURRAY HUMPHRY, Esq., Downing
College, Surgeon to Addenbrooke's Hospital.

LECTURE IV.

Antiphlogistic Treatment; Local Applications; Treatment of preliminary Depression; Stimulants in early Stage of Inflammation; Chronic Inflammation, Treatment of, by Depletion; Ill effects of too much local Depletion; Mercury: Attention to General Health; Ill Effects of long-continued Poulices; Strong Irritants; Exercise of the inflamed Part, to be enforced in Hysterical Cases, and sometimes excited by Electricity; Counter-Irritants, Mode of Action, when to be employed, and in what Form; Issues; Pressure.

The general antiphlogistic treatment comprises a variety of measures, intended as auxiliaries to bleeding, in subduing inflammatory fever, such as aperients, diuretics, sudorifics, more particularly antimony, (which, besides its lowering effect upon the system, is supposed to possess some direct anti-inflammatory property,) and saline medicines. To these are added sparing diet, rest in the recumbent position, and elevation of the inflamed member.

The local applications best adapted to the relief of acute inflammation situated below the surface, as in the knee-joint, are those which combine the soothing influences of warmth and moisture, at the same time that they promote perspiration, and prevent chafing and irritation of the tender part. The continued application of warm fomentations or poultices upon the skin over an inflamed joint, no doubt exerts considerable influence in allaying the disease; they are, on the whole, more generally beneficial than cold lotions, but the sensations of the patient will often guide us aright in our choice between these opposite measures. When the inflammation attacks the surface, as in cutaneous erysipelas and superficial burns, great relief is afforded by dredging the part all over with flour; this is often more agreeable to the patient, as well as more cleanly, than either warm fomentations, cold lotions, or carded cotton. I suppose it acts in the same manner as oil, by screening the inflamed and smarting skin from the irritating influence of the air.

I have endeavoured to point out the general principles only of the treatment of acute inflammation with inflammatory fever, and must leave you to fill up the detail, and gain a further acquaintance with this, the most important branch of your study, where alone it can be effectually done, at the bed-side of the patient. There you will see the mischief of treating diseases by name, of commencing the indiscriminate use of the lancet, and pouring in volleys of calomel and opium, of purgatives and saline medicines, because an affection is pronounced to be inflammatory. You will discover the necessity of modifying the treatment according to the symptoms of each particular case, and the powers of the patient, and the advantage of occasionally adopting the humbling and difficult resource of leaving the case entirely to nature's therapeutic skill.

Occasionally we are called to a patient during the preliminary stage of his illness, before its particular features have declared themselves. We find him feeble, chilly, and miserable; some kind of attack is evidently impending, but we cannot tell what it may prove, or where it may be displayed. Under such circumstances we can only treat the existing symptoms, and by applying warmth and stimuli of various kinds, endeavour to rouse the system, so as to break the first appreciable link in the chain of disease, and arrest it at its very commencement. A good dinner will sometimes check a rising fever, a day's hunting will prevent an attack of rheumatism, and wine whey, with a warm bed, may stop a coming cold; agreeable remedies, but unfortunately not altogether unattended with danger, and more likely to be successful when prescribed by the patient than by the medical man, who is seldom called in till the time for such proceedings is gone by, and who cannot so easily judge of the capabilities of the patient to rouse himself to exertion. We are, therefore, generally obliged to content ourselves with less decided measures and, there is no doubt, that by endeavouring to mitigate the preliminary depression, we are taking the best preventive measures with reference to the severity of the succeeding illness.

The application of stimulus to a part in which inflammation is impending, may, in like manner, occasionally succeed in arresting the incubating process, of whatever kind it be, and so prevent the subsequent stages of the disease. But we have rarely an opportunity of employing any such treatment, because the stage of depression in a part preliminary to the reaction, as I mentioned in the last lecture, is seldom to be

recognized; and the first notice of the local disease is not generally observed till the inflammation has fairly commenced.

When inflammation results from the application of a poison, as in gonorrhœa, the regular march of the disease may be sometimes broken, and the poison hurried, as it were, through its stages, or ejected from the system by a strong stimulating application, such as a solution of nitrate of silver, which is quickly followed by acute inflammation; the inflammation so excited, being freed from the peculiar influence of the poison, subsides in the same manner as it does when occasioned by any other accidental cause. To be successful this treatment must be adopted at an early period, before the inflammation caused by the poison has fairly set in, otherwise the original disease is aggravated rather than superseded by the additional inflammation; secondly, the stimulus must be strong enough to impress a new character upon the inflammation; the superadded disease must take the place of the primary inflammation, which cannot be ensured without risk to the structure of the part, if the latter have attained to any great degree of severity.

Very frequently after the acute symptoms have subsided, the inflammation lingers in a languid, sluggish, chronic condition, or it may have presented these characters from the beginning. Chronic inflammation, in its chief features, corresponds with acute inflammation; it is attended by the same disposition to effusion of serum and lymph, interstitial absorption, ulceration, and mortification, but the difference consists in the greater languor and inactivity of the process, the greater relaxation of vessels, and the more tardy current of blood through them, and the heart's action is not increased, either in force or rapidity. General bleeding is, therefore, very rarely required in the treatment of chronic inflammation; it may be rendered necessary, by other co-existing circumstances, such as a plethoric condition of the individual, but independently of these, it is scarcely ever required for the cure of the local disease itself. Abstraction of blood from the part is very often beneficial, more particularly in those numerous cases which occupy the wide intermediate space between acute and chronic disease, to which the term subacute has been applied. You will not forget that the object in these cases is rather to produce a continuous or repeated effect, than to cause a sudden impression, more relief being generally derived from the repeated application of a few leeches than from a larger number at one time, and, with a few exceptions, such as the os uteri and eyelids, they should be placed as near the inflamed part as can conveniently be done.

You must beware of continuing this treatment too long, that is to say, beyond the time during which its good effect is evident, because there can be no doubt that the repeated application of leeches tends to weaken an organ, and render it more liable to further attacks of inflammation. I am quite disposed to credit the experience of the patient at the hospital, who frequently suffers from inflammation of the eye, and who told us the other day that leeches once or twice applied afford her relief, but that a more frequent repetition of them

makes the eye weak, and protracts the period of its recovery. The injurious effects of repeated local depletion are particularly observed in the cases in which inflammation does not exceed its congestive stage, such as the determinations of blood to the head, so common about and soon after the period of puberty, attended with the sensation of fulness, as though the head would burst, which makes the patient most anxious to lose blood, and the temporary relief afforded by leeches or cupping is so great, that he is no less impatient to repeat the treatment, when the symptoms return with unabated force, and he is less able to bear them. The commencement of these symptoms may be often traced to free and repeated local depletions, instituted for the purpose of arresting some inflammatory affection of the eye or other part of the head, and they are observed most frequently in persons of languid circulation, with feeble pulse, and blue cold extremities.

Mercury is also a very valuable remedy in chronic inflammation, attended with effusion of lymph, as in chronic iritis. Its effect will, probably, require to be maintained for some time, and it should, therefore, be introduced into the system gradually, by small and repeated doses, so as to avoid the disorders caused by its more free administration. By caution in its use, the patient being under surveillance during its influence, allowed his usual exercise, if possible, and that simple diet which suits him best, mercury may be given so as to produce sufficient effect upon the system, and continued for a considerable time, without injury to the health; indeed, the patient very often improves greatly in appearance and vigour during its administration. The slightest effect upon the gums, so slight that the patient is scarcely aware of any soreness, or even of an unpleasant taste in the mouth, is sufficient, in most cases of chronic inflammation. A more powerful impression is attended with certain injury to the constitution, without corresponding alleviation of the disease.

In treating chronic inflammation more than any other form of local disease, it is essential to pay much attention to the state of the constitution, for the continuance of the malady is often dependent on some disorder of the general system, particularly of the digestive organs, which impedes our remedies, and is likely to be felt more severely, or to show itself in some other form, if the local disease be cured. It is the more important to be on the watch for constitutional ailments, because during the existence of the local disease, they are often in abeyance for the time. A patient is admitted into the hospital with a sore leg, and we should not discover that he labours under any constitutional defect, did we not learn that previous to the appearance of the ulcer, he was for some months out of health, suffering under indigestion, headache, languor, or some other symptoms, which have ceased since the existence of the local disease; perhaps we may further learn that the ulcer had appeared on several former occasions, each time being productive of relief to the general indisposition which again returned when the ulcer was healed.

Chronic inflammation is very often connected with a debilitated state of constitution, associated, it may

be, with disorder of the digestive organs, and requiring tonic treatment by medicine, or more nutritious diet, exercise in the open air, cold ablutions, &c. Exercise in the open air is so essential to the maintenance of the general health, especially of persons whose occupation is chiefly out of doors, that we are unwilling to confine them to bed unless such complete rest be essential to the cure of the local disease. I have frequently seen affections of the joints progress more rapidly to suppuration, destruction of the synovial membrane, and ulceration of the cartilages, in consequence of the routine treatment, by rest and confinement to bed, being pertinaciously adhered to, in spite of the intimations given by the pallid countenance, the failing appetite, and the increasing perspirations. It is often advisable, more particularly in mild weather, to allow the patient to move about and go out of doors, even at the apparent risk of injury to the local disease. When general exercise can be combined with rest of the affected limb by means of splints and crutches, it should almost invariably be permitted.

We employ besides, three chief local remedies in the treatment of chronic inflammation,—namely, stimulants, counter-irritants, and pressure.

Our usual intention in the employment of stimulants is to brace the weakened organ, to astringe its relaxed and dilated vessels, and to give an impulse to its nutritive energies. To effect the first of these purposes, we apply cold, either exposing the part to the air, or using cold water or lotions. Of course such treatment is incompatible with the continuance of poultices and warm fomentations, and I may take this opportunity of warning you against regarding such applications as mere negative agents, and prescribing them in a routine indifferent manner, or continuing their employment too long in cases of chronic inflammation of the skin, or in erysipelas when the acute symptoms have passed away, for the chronic stage of inflammation is very often prolonged by perseverance in these applications, which have the effect of weakening and relaxing the part upon which they are placed. Unless there be some additional cause, rendering poultices desirable, they should rarely be employed in superficial inflammations after the acute stage has passed away, and the part has acquired a blue languid appearance. I have seen several cases of chronic inflammation of the eye, with swollen conjunctiva, marked with blue dilated tortuous vessels, where the disease was evidently kept up by poultices and fomentations applied in a thoughtless manner, and which were cured merely by the discontinuance of the local treatment, and the exposure of the part to the air. The profuse discharge, and the slow healing of wounds after phlegmonous erysipelas, are not unfrequently owing in part to the same cause. It is, I suppose, from the observation of the injurious effects of the heedless and routine prescription of poultices, in cases of chronic cutaneous inflammation, that some surgeons have discarded them altogether, and, falling into an opposite extreme, have erased from their list of remedies an application which is often very useful, as well as comfortable to the patient.

These observations on the injurious effects of long continued poultices and fomentations to superficial inflammations, apply in a less degree to the instances in which the disease is deeper seated, because the influence is less marked, but it is, nevertheless, equally true, that chronic diseases of joints and glands are sometimes maintained and aggravated, and suppuration induced, by a careless adherence to these relaxing applications.

The stimulants applied for the purpose of strengthening and bracing an inflamed part should be mild, so that they may be frequently repeated. They are often of much service in chronic inflammation of the external tunics of the eye, and you will find a lotion of alum containing one or two grains to each ounce of water generally sufficient at first. Weak solutions of sulphate of zinc or copper may be required after a time, but be careful not to employ them of too great strength so as to produce more than a slight smarting sensation, which passes off in a few seconds, for much injury is done to the delicate textures of the eye, and a most troublesome condition of chronic inflammation, with thickened villous, or even warty state of the conjunctiva is often engendered by the repeated application of strong stimulants, more particularly by the nitrate of silver. The disease thus produced has peculiar characters, which may be generally recognized at once by the experienced surgeon. I do not mean to say that solutions of nitrate of silver and other salts of the same kind are never to be used, but that they are not very often required in chronic inflammations of the eye unattended by ulceration, and I wish more particularly to caution you against their long continued or repeated employment.

There is another mode in which stimulating applications sometimes succeed in curing chronic inflammation, namely, by exciting a more severe inflammation, which seems to eradicate the former disorder, and then itself passes off in the ordinary manner. An attack of erysipelas of the face is often followed by the cessation of an inflammatory affection of the skin or eyes, which had long resisted treatment; and you remember how quickly the ulcers of the leg healed after the occurrence of erysipelas in the two men who lately left the hospital. We sometimes avail ourselves of this hint of nature by applying strong irritants to chronic inflammations of external parts. A blister or sprinkling with savine powder or cantharides will sometimes cure a chronic cutaneous disorder by exciting a smart attack of inflammation. A solution of nitrate of silver or sulphate of copper dropped into the eye once or twice will occasionally bring to a favourable termination an inflammation of the conjunctiva, which has long resisted milder measures; and our journals contain accounts of the cure of obstinate diseases of joints with effusion, having sometimes been obtained by the bold expedient of injecting a solution of iodine into the synovial cavity.

But this heroic method of treatment is, of course, not unattended with danger. The newly excited inflammation may not subside so kindly, and the surgeon then must bear the blame of having aggravated the

disease ; so that the practice of applying strong stimulants to chronic inflammations with the view of exciting acute disease, is not, except in a few safe instances, adopted by educated practitioners. It constitutes one of the great resources of the quack, who is not in the habit of considering the mischief done by his panaceas, and who is not very careful of the limbs or lives of his patients or of his own reputation. That it is sometimes employed by him with success there can be no doubt, and you will do well to take opportunities of acquiring information from the bold experiments of these fearless empirics. An inhabitant of this town had long suffered under that very troublesome complaint,—a chronic inflammation of the Schneiderian membrane, with discharge from the nostrils, disagreeable smell, &c. He had consulted several physicians and surgeons without benefitting by their advice, and had used a variety of mild astringent solutions and powders in vain. One day he happened to be in company with a quack, who discovering his ailment promised him a speedy cure, and gave him a powder to snuff up, telling him to persevere in it for two or three days, in spite of the pain it would occasion. He did so, although a severe attack of inflammation ensued, causing such pain that he thought he should lose his senses, a profuse discharge followed which soon subsided completely, and left him quite well. From that time, now four or five years ago, he has suffered no return of his old complaint. A strong injection thrown into the urethra will sometimes cure a gleet in the same manner, and the ordinary treatment of hydrocele consists in exciting smart inflammation of the tunica vaginalis testis by an injection of port wine, iodine, or other stimulating fluid.

The application of nitrate of silver in substance or strong solution, in some instances proves a very expeditious mode of curing inflammatory affections, particularly certain ulcers of the tongue, os uteri, and cornea, and erratic erysipelas occurring in feeble persons. It is not quite clear in what manner the salt acts to produce these good effects, neither can I tell with any certainty in what cases it should be employed, for I have seen each of the above affections aggravated by its use.

The natural stimulus to the healthy state of the circulatory and nutritive processes is the natural exercise of the function of a part. This is to be permitted when the inflammatory affection has passed away, or when it has nearly subsided. The morbid condition of the hysterical joint is best removed in this way. If the patient cannot be made to exercise the limb herself, it is well to effect passive movements, and if she can be induced to walk about, the weakness of the joint which commonly co-exists with the hysterical pain, and which probably depends upon some slight inflammatory disorder, will soon begin to amend. It is worthy of observation that the joints of the upper extremities, which are in more incessant motion than those of the lower limbs, rarely become the seat of this peculiar disease.

A remarkable illustration of the benefit to be derived from exercising a painful joint in which there are no other very decided evidences of inflammatory disease,

was afforded by the young woman who was admitted into the hospital about four months ago, with her knee bent beyond a right angle and fixed in that position, the slightest attempt to move it causing excruciating pain, so that perseverance in such attempts was out of the question. Gentle pressure also caused severe pain, and she was reported to be kept awake nearly all night and day, by the darting pains in the joint. She had long been confined to her bed, and her suffering and the apparant severity of the disease were so great that amputation had been recommended before her admission, and she was sent to the hospital for that purpose. The absence, however, of proportionate impairment of her health and of the usual physical signs of disease in the joint, together with her ability to bear the weight of the leg in the flexed position of the knee, when she was standing upright upon the other foot, the muscular resistance which was offered to attempts to extend the joint, the absence of pain upon firm pressure when her attention was withdrawn, and the utter futility of all remedial measures which had been employed, combined to lead us to the opinion, that although there might be some slight disease in the joint, it was by no means proportionate to the pain expressed. Having, therefore, subjected her to the influence of chloroform, we extended the limb without much difficulty, and kept it so by splints. No disposition to retraction was evinced. Passive movements of the limb, frictions, &c., were maintained for a time, she was then urged to move about by dint of main force, each day being obliged to do a little more, for if left to herself she never advanced in the slightest degree, though she was evidently most anxious to get well, and was delighted at the improvement. By perseverance in this treatment alone, she gradually regained the use of the limb so as to be able to walk without assistance when she left the hospital. Some obscurity was thrown over this case by the swollen blue cold condition of the limb; and I am by no means prepared to say that there was no disease in the joint, but that it must have been very slight, whereas the pain really experienced was very great.

You will find that it is often no easy matter to decide as to the propriety of permitting or prohibiting the exercise of an inflamed organ. As a general rule it is essential to keep the patient, as well as the part affected, as much at rest as possible during the acute stages of the inflammation. In chronic inflammation it is conducive to the health of the patient that he should be allowed to move about, while we still endeavour to ensure the rest of the organ. In a still later stage, when the inflammation has nearly or completely passed away, and a sense of weakness only remains, dependent upon the structure of the part not having been restored to a natural condition, it is not advisable to maintain these restrictions as to its use quite so strictly. For the exercise of function being the stimulus to healthy nutrition, we can never expect a muscle or joint to resume its healthy condition so long as the movements of a limb are prevented by splints and bandages. At such a period, therefore, it is wise to allow the moderate and cautious use of the part.

Sometimes, indeed, it is necessary to do more, and to stimulate the part to exertion. This is particularly true with regard to the delicate fabric of the nervous system, where a slight degree of inflammation may so spoil the structure as to render it insusceptible of the ordinary impressions. Under such circumstances, if some extra influence be not applied, by exciting the exercise of function to supply the stimulus to nutrition, the texture will still further deteriorate, and a paralysis which might have been cured, by the timely use of strychnia or electricity, will become permanent.

In adopting such treatment, we must not forget that we are dealing with a part recently inflamed, and that a recurrence of the disorder is almost sure to be produced if the stimulus to exercise be commenced too early, or continued too freely. The condition of the part is analogous to that of a patient recovering from illness who requires to be roused to the exertion necessary for health, but who will assuredly lose ground, and perhaps be subjected to a relapse, if his powers be tested too early, or urged too freely.

I suppose that frictions and champooing, which are sometimes so very successfully employed in the treatment of chronic affections of the joints by persons who devote themselves to this occupation, owe their curative effects in some measure to the stimulus and the movements communicated by the rubbing, kneading, and pummelling to which the part is subjected.

With reference to the effect of movement and rest upon a part which is the seat of chronic inflammation, it is to be remarked that the patient generally suffers the greatest uneasiness and stiffness when he begins to move after the rest of the night, and that these wear off when the limb has been in exercise for a short time, though they probably increase again towards night, especially if the limb have been much used during the day. The lame horse shows his defect at the beginning and end of his journey, and the horsemaster knows that to confine him to the stable for a few days would have the effect of disabling him altogether. These facts seem to prove that moderate exercise exerts some influence in restraining chronic inflammation. I grant that it is not easy to turn this hint to a practical account, for it is often difficult to decide whether the tender part will bear the exercise of its function, but it is well not to lose sight of it, and it may modify your directions in some particular cases. I have often observed slight inflammatory affections of joints to be aggravated by too strict an adherence to the rule of keeping them fixed and at rest, and have found them do better, and recover more quickly, when the retentive apparatus has been applied somewhat less accurately, so as to admit a little movement; for instance, when the splints have been discontinued, and strapping and bandage alone employed.

In speaking of the effect of leeches in relieving deep-seated inflammations, I mentioned the sympathetic relation which appears to exist between the internal organs and the superjacent skin. It is in consequence partly of this relation that the integuments of an inflamed joint become red and tender; and it is probable

that impressions are conveyed more readily in the opposite direction,—namely, from the skin to the synovial membrane, so that soothing applications to the former produce a corresponding effect upon the latter; and an irritation of the skin will in like manner be communicated to the joint. This sympathetic relation between the coverings of the body, and the organs placed beneath them, affords, in some measure, a clue to the explanation of the effects of counter-irritants, and furnishes some important practical information as to the principles which should guide us in the employment of these very valuable remedial agents.

If the effect of a blister placed upon the skin of an inflamed joint depends, not according to the commonly received notion upon its drawing the disease from the inflamed part to the skin, but upon the extension to the joint of a slight degree of the same condition which is excited in the skin, we may consider the measure as tantamount to the application of a stimulant to the joint itself, a very mild one, it is true, because its operation is confined to a sympathetic influence conveyed from the skin; it may, therefore, be expected to be beneficial or otherwise, precisely under the same circumstances as would a slight amount of stimulus applied directly to the inflamed part. This accords with what we find to be the general result of experience. When the inflammation of a synovial membrane is acute, the stimulus of a blister on the skin invariably aggravates the disease. It is not till the acute stage has passed away, and slight inflammation alone remains, that the extension of a slight stimulating influence from the integuments can be borne, or is likely to be beneficial.

This view of the *modus operandi* of blisters assists us also in the selection of the spot to which the counter-irritant should be applied, for the radiating influence is felt most strongly in the immediate neighbourhood of the irritant, and we may regulate the effect upon the inflamed part by the distance at which we place the blister upon the neighbouring skin. An inflammation of the eye is sometimes increased by a blister upon the temple, which might have afforded relief had it been placed behind the ear, and it is only in very slight inflammation of the internal tunics of the eye that we can venture into such close quarters with ordinary stimuli, as to apply them to the conjunctiva itself. You probably remarked the request made by the patient who is now in the hospital recovering from a fourth attack of iritis, and who has therefore some pretensions to be a judge of the value of remedies in his own particular case. "Don't you think, Sir," he asked, "that a blister behind the ear would do my eye good now," when I inquired why he wished to have it behind his ear, he replied, "because when it is placed on the temple, it terrifies the eye so much." In the great majority of cases, however, in which it is advisable to apply a blister at all it should be placed immediately over, or as near as convenient to, the inflamed part.

The repeated effect of a succession of blisters is generally productive of more benefit to slight inflammatory affections or the slight remnants of acute inflammations, than one blister kept open by savine

cerate. But when the inflammation has been longer continued and has proceeded to structural alterations, I think that a continued impression upon the skin attended with the discharge of pus is more efficacious. In slight conjunctival inflammations, where a counter-irritant is required, a blister or a succession of blisters will generally answer the purpose; but in cases of chronic cornetitis, where that tunic has been rendered partially opaque, and its surface is roughened and more or less covered with fine red vessels, greater benefit is derived from an open blister, combined perhaps with mild astringent lotions than from a succession of blisters. The same remarks apply also to diseases of joints, where much thickening of the synovial membrane and other structural changes have occurred, and to chronic inflammations of bones with thickening. You have had many opportunities of witnessing the decided benefit which commonly follows the formation of a caustic issue, whereby a portion of integument is killed, and suppuration, granulation, and cicatrization excited, upon a diseased joint in which ulceration of the cartilages forms the prominent feature. These issues should be placed as nearly over the immediate seat of the disease as can conveniently be done, and they are maintained with best effect by the occasional re-application of the caustic potash.

The good effects of counter-irritants are not to be attributed entirely to this communication of a stimulating influence from the surface to the inflamed part, for they act besides, more particularly those which are long continued, such as setons, issues and open blisters, by furnishing a drain to the system, and supplying a new disease in place of the one we are anxious to cure. It appears, in some cases, that local disease, either in consequence of its long continuance or a diseased state of the body, is essential to the general health, and a chronic inflammation will, under such circumstances, resist our efforts to dislodge it, or is driven from one region only to make its appearance in another. This happens more particularly in delicate children, and in persons who have passed the middle period of life, or whose constitution is broken by intemperance, anxiety, hard work, and so forth. The maintenance of a purulent discharge by issue or seton is by far the most effectual local treatment of chronic inflammation in such persons. There is no need to produce a copious discharge, for a slight effect is generally sufficient to answer the purpose. Any little accession of constitutional disturbance will probably vent itself by an increase of inflammation and suppuration at the issue, which becomes a sort of barometer of the health, and should be merely kept open by a pea or thread, and not worried by savine cerate and other irritating applications.

In persons advancing in years, it is rarely safe to allow the issue to heal; but in children and persons in whom the local disease depends upon a disordered state of the constitution, the issue may be closed when the general health has been re-established, or when the child may be supposed to have outgrown the disposition to disease. An issue should not be maintained longer than necessary, for the artificial disease unquestionably

does some injury to the surrounding parts, and unless its presence be required to combat another local affection, or to relieve a particular state of the constitution, the sooner it is closed the better. This is equally true of blisters and other counter-irritants. The inflammation excited by them injures and weakens the limb or joint to which they are applied, and does positive harm unless there be some counteracting good effect resulting from them. Moreover, in young and delicate persons, they are often followed by ulcers and boils in the surrounding skin, which occasion a good deal of trouble. The apprehension of these consequences makes us unwilling to resort to irritating applications, unless they be absolutely required.

Rubefacient liniments, such as the common *Linimentum Terebinthinæ*, or the oil of turpentine itself, which act in the same manner as counter-irritants, and combine the advantages of friction, are often very serviceable in the treatment of slight inflammations of joints. The rapid impression of a mustard poultice renders it exceedingly efficacious in a great number of sudden slight affections, or even occasionally in the preliminary stage of those which, having been preceded by a chill, promise to be more severe; the effects, too, of a mustard poultice pass off so quickly, that they do not entail much evil, even if it does not succeed in arresting the inflammation. An excellent mode of producing instantaneous counter-irritation, which is likely to be very serviceable in sudden seizures of lumbago, sciatica, and other similar affections, is the old plan recently revived, of passing a heated iron quickly over the skin, so as to produce redness, and a smarting or burning sensation. These applications, whose effects are so transient, are not much suited to cases in which disease has been of long continuance, or in which structural changes have occurred.

I do not commonly use the tartarized antimony as a local application, because its effects are not very easily regulated, and I am not aware that it possesses any advantage over other counter-irritants. An issue may be sometimes conveniently established by dressing a small blister from which the cuticle has been removed with *Unguentum Antimonii Tartratis*, and is well adapted to the treatment of some of the severe diseases of joints occurring in children.

Pressure is one of the most effectual means of preventing inflammation, and of checking it when it exists in a slight degree. The lung compressed by serum effused into the pleural cavity is rarely inflamed. A sprained joint is least likely to swell and inflame if it be bandaged at once, and fractured limbs which are enclosed in well adapted splints and bandages soon after the accident certainly swell less, and are less painful, than when subjected to the old fashioned treatment of placing them upon pillows, and applying lotions. The well regulated application of pressure is also one of the best means of preventing the occurrence of injurious inflammation in wounds, and you may often see inflammation of the integuments, and deep-seated structures of a limb, terminating abruptly at the line where a bandage has been applied. This treatment requires to be employed and watched with caution, and

the pressure should be removed if pain increases, for its continuance, when the inflammation proceeds in spite of it, may be productive of disastrous results. I have once or twice known extensive sloughing take place in consequence of inattention to this precaution.*

Pressure is used in a variety of ways in the treatment of chronic inflammation. When the integuments are swollen and purplish, or indurated, in cases of chronic ulcers, in enlargements and indurations of glands, in swellings of joints from synovial disease, attended with thickening of the membrane, or effusion into the joint, pressure, by means of plasters, bandages, or splints, is the most usual and the most effectual means of treatment.

It is not quite clear in what manner it controls the inflammation, or promotes the removal of effused products. Its good effects are not limited to the dispersion of swelling, for it is very beneficial in cases where no swelling exists, such as certain painful affections of joints, attended perhaps with slight crepitation, but unaccompanied by thickening of the synovial membrane, or effusion into the articular cavity.

You have probably remarked, that each of the three methods of local treatment which I have been describing,—stimulants, counter-irritants, and pressure,—are occasionally effectual in arresting the onset of an inflammation, as well as in curing its later or chronic conditions; they are employed before the acute stage has set in, and after its termination, and their good effect at these two periods is confirmatory of what I said respecting the nature of the preliminary stage of inflammation, and the state of the part in which it exists, for it accords with the view I gave you of the enfeebled energies of the organ about to suffer an acute attack of inflammation, that it should be roused to its natural condition, and enabled to break the first link in the chain of disease by remedies of the same nature as those which serve to stimulate and brace it after the storm has burst upon it, and which assist in dispelling the lingering remnants of the attack.

CASES FROM PRIVATE PRACTICE.*

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SCORBUTUS.

REMARKS.—On reference to the writings of all authors who have described this disease, particular allusion is made to the great prevalence of scurvy in former times—before its nature and treatment were so well understood as they now are. Amidst maritime communities the affection is by far the most common, and our naval history of the last century gives the most appalling details of its ravages, which were sometimes so fearful as to threaten the entire destruction of a

fleet, and often making far greater havoc than the most sanguinary battles. So remotely back as the time of the holy wars, mention is made of the complaint, and it is pretty certain, from various sources of information, that it prevailed in the kingdoms of northern Europe prior to that date. Some of the older writers state its occasional epidemic occurrence in this and other countries; and during some of these visitations many were swept off by the disease. There is one fact now thoroughly substantiated, that of all the alleged conditions entering into the causation of scurvy, diet lacking a proper proportion of acid fruits and succulent vegetables, is immensely the most important—a truth that has been abundantly corroborated by positive and negative proofs. To some of our naval commanders* is justly due the greatest credit for their correct and philosophic observations relative to many important particulars associated with a study of the affection. Being men accustomed to habits of reflection, and exceedingly desirous to banish from their crews so destructive an assailant, they carefully watched its progress and decline, tried different remedies, and endeavoured to trace to its true cause the rapid recession which it would make when the ship reached a distant port, and the diet of the men thus became changed; it was in this manner that the wonderful virtue of the acescent fruits and fresh vegetables was unequivocally established. Military medical, and other records† also furnish us with instances of its calamitous occurrence amongst the troops; and these have generally occurred after the men had been debilitated by long and laborious campaigns, and when so circumstanced as to be unable to procure the proper amount and right kind of provisions. Fodéré tells us that the soldiers in the army of the Alps suffered by it very severely, and Larry remarks the prevalence of scurvy during the siege of Alexandria. The reports, which during the last ten or twelve years have been given to Government authorities, relative to our prisons, gaols, and hospitals, have attested the fact that error in kind, or insufficient quantity, of diet constitute the most fertile of all causes in the production of scurvy. The general failure of the potato crop two or three years ago, undoubtedly gave rise to the unusual prevalence of the complaint in question—a position which those who saw much of the mode of living amongst the poor, the immensity of their destitution, and the general distress which the loss of this valuable article of food gave rise to amongst them, can indubitably attest. Turning from these general observations respecting the disease, and confining these brief remarks more particularly to the case now given, it will appear manifest that causes brought into operation in a solitary case, from a combination of circumstances of a nature similar to those

* Cook, Parry, Berkeley, Bridport, Hawkins, etc.

† Larry. *Thém. de Chr. Militaire*; *Hist. de Louis ix.*, par le Sieur Joinville; Hume, Lingard, Alison, etc.

where this influence extends to numbers, were followed by like results; and, as the sequel will show, such clearly consisted in an improper and scanty food. The patient having long laboured under dyspepsia, had for that complaint sought the opinions of various practitioners, and the last under whose care he was previous to my being called in, strongly recommended one description of diet, which, as he fallaciously conceived, was indicated until the digestive organs had fully regained their tone. As stated in the report, for two years the individual had lived chiefly upon stale bread and tea, and when I first saw him, his stomach had become so debilitated that most other kinds of food could not be taken without producing distension and disorder; if he ate a full meal it was sure to render him very unwell. I may here mention, that amongst the lower classes of society, there is a description of dyspepsia produced by individuals living so much upon slops, which their straitened circumstances compel them to do, and which those practitioners who have had much communication with the poor cannot fail to have noticed. Amongst many of the lower orders, tea and cake form the staple articles of diet; and these persons, when they apply at the hospitals and dispensaries, complain of watery eructations, flatulence, gastric distension, and cardialgia; the pulse is soft and resistless; bowels torpid; and frequently there is flabbiness of the muscles, with more or less of general emaciation; and the patient upon being interrogated, will often say that any other kind of food produces pain in the stomach and much uneasiness. I recollect that my friend Dr. Hughes Bennett, now Professor of Physiology in the University of Edinburgh, first pointed out this fact particularly to my attention. That gentleman also told me that he had not long before attended a case very illustrative of this position. A young lady who resided (if I recollect rightly) at Montrose, came to Edinburgh to obtain advice for a stomach disorder, under which she had long suffered, and placed herself under the care of Dr. Bennett. On being interrogated, she asserted that tea and bread were the only articles of food she could take. She was weak and emaciated; had become nervous and irritable; the bowels were disordered; and she complained of flatulence and cardialgia. Dr. Bennett very properly prescribed mild tonics, ordered her to take no more tea, and to have a varied and animal diet, under which she rapidly recovered.* Those practitioners who reside in rural districts, and who may chance to peruse these remarks, will bear me out in the foregoing statements, that amongst the labouring poor, the

disease in question is very frequently met with; and so far as my own experience warrants me in giving an opinion, restriction as to the quantity of warm liquids, the daily allowance of fresh animal food, and ten or twenty drop doses of the diluted sulphuric acid, in a weak infusion of calumba, or in water, is a very successful mode of treatment. Considerable quantities of diluent liquids cannot fail to impair the digestive organs; first, by diluting too greatly the gastric juice, and thus preventing that reductive action upon the food, so necessary in this, the first stage of digestion; the parietes of the stomach become morbidly distended by the evolution of gases; the contents of the organ are propelled, insufficiently acted upon, into the duodenum and lower parts of the alimentary canal, and the conversion of the ill-formed chyme into chyle is imperfectly performed; the bowels become disordered from the passage of indigested matters; hence diarrhoea or constipation, caused by irritative action on the digested surface, or the collection of crude matters. The circulation being in a secondary manner rendered slower, the liver becomes engorged, and disorder of the biliary apparatus is superadded to the morbid conditions already existent; and so it is, that whenever there is chronic dyspepsia, the practitioner may rest assured that the functions of the hepatic viscus are more or less at fault.*

It has been said that the patient whose case is now particularly considered, lived, during two years, mainly upon one kind of food, under which those symptoms that could not fail to follow succeeded, and scorbutus was the result. When I first saw him, the bodily powers were much reduced; the eye looked dull and listless; lips blanched; cheeks fallen; gums mottled and vascular; teeth loosened; extremities swollen; petechiæ, and dark hæmorrhagic patches, were also manifest, and it was too obvious that unless some amendment was ere long produced, a fatal termination would ensue.

Between purpura hæmorrhagica and scorbutus,† there is an essential difference, notwithstanding some nosologists having considered them identical; and this difference appears indisputable, from the following considerations:—Because scurvy comes on at certain periods, at least, whenever it is considerably prevalent during particular seasons; scurvy comes on gradually; purpura

* For information on this subject the reader is referred to Dr. Wilson Philip's excellent treatise on "Indigestion."

† The late Dr. Graham, of Edinburgh, once observed to me, that his experience impressed him with the opinion, that intemperate butchers, those who were hired by the master-butchers as slaughterers and assistants, were particularly prone to purpura hæmorrhagica. This class of individuals in Edinburgh is almost invariably addicted to drinking large quantities of ardent spirits, and lives chiefly on animal food. During the time of my being Clinical Clerk in the Royal Infirmary of that city, some instances confirmative of the Professor's opinion, are now distinctly remembered. Was this condition owing to too much nitrogen being taken into the system?

* I distinctly recollect that Dr. Christison, in his Lectures on Dietetics, gave it as his opinion, that in convalescents from fever, and other patients, where much general debility was present, and where the individuals asserted they could not digest soups, that small quantities of well-cooked mutton could not only be taken with impunity but benefit; and my own observations have confirmed this remark.

often quickly; in the one, spongy gums invariably are seen; in the other this is not the case. In scorbutus, acid fruits and succulent vegetables will alone produce a cure; in purpura they are taken without effect. In the one, blood-letting is often of great service; in the other, it would be followed by considerable aggravation of the symptoms; hence, from these facts it cannot be said that they are really the same, although admitting of many similarities.

The study of those morbid conditions in the system which give rise to scurvy renders them of deep interest to the scientific pathologist,—to him who examines the causes as well as the effects, because its study shews him that a primary change in the blood will readily affect the entire system, and produce morbid anatomical conditions of the gravest character; and, indeed, a reflection on these changes inclines us to think with less prejudice on those humoral doctrines with which the minds of the older physicians were so much imbued. Some writers have affirmed that scurvy was dependant upon capillary distension; but experiments have tended to an opposite opinion, because, when a limb has been injected, the extravasation, if any, that has been produced, was not discernible to the naked eye, either in the integuments or in the sub-cutaneous cellular tissue, or between the muscles. If it were

dependant upon capillary parietal distension, it would not be too hypothetical to presume that the nervous system was the primary seat of the disorder, because the nervous fibrillæ which supply the extreme vessels with nervous energy, improperly performing their functions, the vascular extremities acquire a tonic fulness—a fact that has long been established by positive and negative proofs. For instance, in fever the capillary system sympathises with those changes which are produced in the great nervous centres,—a doctrine propounded by Hoffman, and established by Cullen. Again, in those cases of apoplexy described by Abercrombie as *nervous apoplexy*,* the extreme vessels are affected, but in a manner opposite to that which they are during the febrile paroxysm; the brain, from a diminution of nervous power in itself, fails to transmit the requisite nervous energy to the fibrillæ; the walls of the capillaries are morbidly resistless, and transudation of the aqueous particles of their contents takes place, and thus occurs that not uncommon symptom of copious perspiration. From a consideration of these facts, we cannot refer the true cause of scurvy to disease in the capillaries themselves. That the blood is in a vitiated condition, and that the other phenomena are entirely dependant upon its morbid changes, certain considerations tend to prove. In all the

* A few days ago I was hastily summoned in consultation to a case of what I considered a good example of the above description of disease. The individual was a gentleman, between 60 and 70 years of age, stout and muscular, and had been paralytic a year previously; for, remarkable to say, exactly twelve months from that day he was struck down in apoplexy, which left paraplegia of the left side. This gentleman throughout life had been a man of active business habits, and constantly engaged in large monetary transactions. Having acquired a handsome fortune, he retired into private life, soon after which he had the first fit, but after that attack he so far recovered that he had determined to resume his former calling, the monotony of retirement being felt so irksome. About eleven o'clock in the morning he was found lying on the dining-room floor, in what was conceived to be a dying state. A few minutes previously he had been seen by some of the inmates, and was then, to all appearance, in wonted health. On my arrival he was in bed; the general practitioner who had first been called, and who had been in attendance half an hour, had bled him to twelve ounces. The pulse was of large volume, and quick; the pupils contracted; much convulsive action of the muscular system; the head not very hot; the face, neck, and chest, cool, and bedewed with a copious perspiration. The gentleman in attendance very properly said, that although the pulse felt as if it were a bleeding pulse, yet further abstraction was the question. I did not hesitate, after even a cursory review of the symptoms, to give it as my opinion, that no more blood should be drawn, but in preference recommended powerful counter-irritants. Sinapisms were quickly applied to the thighs, calves of the legs, the nape of the neck, and along the whole course of the spine, with hot bottles to the feet. An injection, with an ounce of turpentine, and two drachms of the compound spirit of ammonia, in half a cupful of starch-gruel, was quickly administered, but only for a moment retained, as the sphincter was quite relaxed. Soon after the mustard plasters were applied, the unwelcome symptoms began to disappear, the pupils became larger, breathing more natural, countenance improved, and pulse softer. As the bowels had not been moved, it was agreed to administer an enema similar to the

last, but in a quart of gruel, which was retained. In the course of a couple of hours he was so greatly improved, as to be considered out of danger. Now, in this instance, I have little hesitation in thinking, that if the surgeon had allowed the blood to flow until he had "thoroughly lowered the pulse," the symptoms would have become more formidable, or perhaps the patient would have rapidly sunk, because, as observed in the text, this I considered to be of that description of apoplexy in which there is considerable prostration of the nervous system, as evinced by the copious perspiration. In a stout, broad-chested individual like this gentleman, it was desirable to relieve the congested lungs and the overloaded heart, but in so doing the greatest caution was requisite, seeing that Scylla and Charybdis were on either side. I recollect some few years ago being called to an elderly female who was struck down in her third apoplectic seizure; the pulse was strong and quick; she perspired very freely. Being alone guided by the pulse, I determined to bleed; scarcely had four ounces been taken, when the pulse suddenly became smaller, and in a few moments the patient expired. It could not possibly be said, that she would have recovered if she had not been bled, yet I am ready to admit, that it would have been better had the lancet not been employed, and the recollection of that case will always make me think carefully before blood-letting is had recourse to, where there is much sweating. I have mentioned the latter instance because I always reflect upon it as an error in treatment, and in the hope that it may warn others, when called to instances of a similar nature. In medicine, however paradoxical it may seem, the most valuable lessons of practice are not always gained from what has been done right, but from what has been done wrong; and it would be profitable often if we knew the mischances as well as the lucky hits of those who write on and practice our too frequently doubtful art.

a The supervention of powerful diaphoresis as critical in continued fever, is ever to be regarded as a most unwelcome symptom, because it shews the great debility of the nervous centres. From a more extensive consideration relative to the pathological fact in question, the reader is referred to a series of papers on Fever, which the *Medical Gazette* did me the honour of publishing in the years 1846-7.

post-mortem appearances which I can find given of this disease, paleness of the tissues is particularly mentioned, consequent, of course, upon diminution of red particles; and as physiologists have unequivocally exemplified, that the vivifying influence resides in these particles, their diminution must give rise to diseased conditions of a more manifest and general character. These red particles are in an occult manner derived from the materials produced by digestion, and require certain constituents; but if the ingesta are such as not to yield the requisite constituents in due quantity, the elaboration of the particles must needs be imperfect, and the portion given off unequal to the imperative demands of the system; hence the loss of vivifying power, and the conditions which constitute disease. Acid juices and succulent vegetables, by possessing these elements, promote the cure. In scurvy, the occurrence of syncope is one of its symptoms; now, in anemia and chlorosis the same occurs, and in the latter, we know that the red globules are sometimes diminished to even one-fourth of their normal quantity, and in such instances syncope is a common symptom; hence, from similar causes similar effects. The first indication of scurvy is a tawny dulness of the skin, manifestly proving that the blood is primarily diseased, and that to its lesion we must refer its true pathology.

It being conceded that the blood is in a morbid state, the next question which may be asked is,—how are the petechiæ, vibices, and hæmorrhagic patches produced? It is a physiological fact, and one that has long ago been pointed out by Le Gallois, and other philosophic enquirers, that the action of the capillaries is imperfectly carried on unless they receive a stimulus from their contents, and this stimulus can alone be properly produced from healthy arterial blood, therefore, when their stimulus is diminished their functions become impaired, and congestion and extravasation result.

On reference to the above case it is seen there was œdema of the inferior extremities, with indurated thickening of the integuments* at the flexures of the knees, conditions almost invariably present in true instances of this disease. These morbid depositions are by far most common in the inferior extremities, in the sub-cutaneous cellular tissue, and between the muscles, and are in some measure dependant upon

gravity. From whatever cause debility of the circulatory function is produced, swelling of the legs is a most probable result, dependant chiefly upon gravity; but in this disease there is a morbid state of the blood itself, as spoken of above, which must considerably favour such result. In those cases in which there is a rapid circulation, fibrinous effusions are more common than when the pulse is slow.*

The constant relaxed state of the bowels, and the light-coloured stools, in the instance of this man, are symptoms highly indicative of the complaint. As he improved the evacuations became more natural.

Soon after my attendance on this person, other cases of scurvy came under my observation, but these were of the milder form of the disease, and being treated at an early stage, were soon, under ordinary remedies, restored to health. The cases referred to were confined to the lower orders, and attributed to the scarcity of potatoes, upon which the poor are so dependant as a chief article of food. It having previously been pretty clearly shown that the loss of this vegetable gave rise to the unwonted prevalence of the disease, I will not here enter upon a question which Einhoff, Vauquelin, and others, have from their chemical researches satisfactorily explained; but I may add, that in those cases which I saw, the individuals for months before had been unable to procure the potato as an article of diet.

In the conclusion of those cases which during the last three months have appeared in the pages of this Journal, I must offer some apology for the length to which the subjoined remarks have inadvertently extended, yet, as the imperfect observations that have appeared inclined to practical results, it is trusted they have not been wholly unprofitable to those who might chance to read them. Being such examples of disease as from time to time are met with in provincial practice, it is not to be expected that they would be of that rare description which the medical officers of metropolitan institutions can cull from their case-books; it would, however, afford me much delight if their publication in any degree tended to induce some of the numerous well-informed members of our profession which there are now to be found in all the remotest districts of the country, to record those instructive illustrations of disease which frequently come beneath their notice. There was a period in the history of our profession when medical literature, unless it emanated from schools and colleges, had the qualifying recommendation of springing from the too-often erroneously conceived fertile brains of metropolitan

* Some chemical pathologists have affirmed that there is positively an abnormal increase of fibrin in the blood of scurvy patients—a statement, unless well authenticated, that appears doubtful, because, although the coagulability is not destroyed, it is certainly less than in healthy blood; while the solution of continuity in the cicatrices of old ulcers, argues powerfully that the plastic properties of the fluid are diminished. Those who have propounded the doctrine of excess of fibrin, base their opinions in some measure upon the circumstance of abnormal organized depositions being common in various parts; but the languor of capillary circulation,—the capillaries rupture, as explained in the text,—together with the effects of gravity, seem sufficiently to account for the morbid anatomical characters in question.

* Some physiologists have denied that the *vis-a-tergo* has any influence whatever on the extreme vessels; this fact alone is rather at variance with such doctrine,—or is it merely from the greater transit of fluid, that more particles are extravasated,—and not from the *force* with which the blood is propelled.

big-wigs,—was held in but slight estimation, as if the phenomena of disease could alone be accurately studied in the halls of a hospital, and opinions and practice alone with safety received through the *ipsi dicunt* of lucky professional dignitaries, or, it might be, courtier or *divinely created* physicians. Let those who question the position maintained refer but to the numerous talented productions that so frequently appear from provincial practitioners, and they will at once be convinced that the abilities of these authors are not mediocral—that they have an indefeasible right to “say their say,” and that their opinions and doctrines should be canvassed with respect. Not long ago, one of the judges at a medical trial very correctly observed, that scarcely any town in the provinces was without its Brodie or its Locock,—that is, if circumstances for observation, and the chances of gaining the ascendant, had been offered to them, as they have been to the names referred to. It is true that there are advantages in the three capitals which afford greater facilities for prosecuting professional enquiries, and obtaining professional eminence, which provincial towns do not afford; yet it is within the power of every man, if he chuses, however disadvantageously situated, to achieve much more than he would at first have conceived practicable. Every one setting himself up as a practitioner of the “healing art,” virtually enters into a moral compact with his patients; and he who does not avail himself of those sources of information placed within his reach, is nothing less than a moral delinquent. No man has a right to conceive, that going forth armed with his diploma, he is henceforth the sure and competent practitioner,—that the study of his profession has terminated, for it might more truly be said, that it has then but really begun; and he who ceases to be the student, should cease to be the practitioner also. Every day’s experience must convince the medical man that the progressive enlightenment of the public must render them less easily made the dupes of chicanery and mysticism than they once were, and that boasted nostrums and secret remedies, are regarded, and rightly, with suspicion. The system of “elegant draughts,” and “nice comforting cordials,” given with little reference to the fundamental causes of the complaint, is fast exploding, and the well-educated are no longer to be the victims of such gullability; they have learnt, however, more correctly, to recognize the man of scientific acquirements—him who exercises what Armstrong termed the *genius* required for medicine—reflection; and the assuming boasters must, ere long, give way to their well-informed and thinking competitors. Routine systems, and conventional notions, are becoming tested by their claims to truth, and accepted according to rational deductions. The indefatigable labours of many of those who cultivate the science of medicine in that spirit of energy and zeal in which alone it can conscientiously be followed, are

every day shedding new lights upon what was once obscure; they are trying, through experiment and ratiocination, to account for anomalies, and, as far as possible, render the science an exact one,—to bring treatment more successfully to bear upon disease,—to attack causes instead of the effects of causes—symptoms; and render more potent an art, of all others, of the greatest concern to humanity. All then are bound, so far as it lies in their power, to lend their aid in carrying out such laudable changes, and every new fact established will add another stone to the fabric of truth and certitude, which is gradually rising beyond the levels of prejudice, and above the wrecks of error. Those mistakes into which we sometimes fall, might often have been averted by more careful examination and patient reflection; and an error in diagnosis is not unfrequently attributable to a hurried review of those phenomena that are thrown out in boldest relief, and more likely to impress the mind.

At a future period it is my intention to endeavour to show, that many medical men do not sufficiently cultivate the *faculty of perception*, by which alone we can decide on those nice distinctions, when even opposite conditions are simulated, and when this or that way of thinking would involve important results; this, with some other considerations suggestive of improvement in the manner whereby medical knowledge would appear to be more correctly pursued, I hope more fully hereafter to dilate upon, and will be contented here with a mere advertance to the fact. As sometimes grave causes can only be distinguished from partially-developed and intricate appearances, it is essential that we should cultivate the powers of detecting these to their fullest indications, and with the greatest certainty.

In some of the foregoing cases, as it will be recollected on their perusal, there was much room for diversity of opinion, and in some instances the treatment was based upon a correct solution of conditions, that, when cursorily reviewed, would seem problematical; and if certain considerations there mentioned were recounted, it would be manifest that it is of weighty import to remember states in the progress of diseases, which must be seen, and cannot accurately be described. To pursue these and many kindred considerations, would here be out of place, but it must be conceded that, although medical science has of late years made gigantic strides, yet until the true spirit of independent enquiry becomes more diffused, and all will study as well as profess their art, there will be fallacies existing, and erroneous opinions maintained.

27, Acacia Road, Regent’s Park.

CASE OF ULCERATED STOMACH.

By GEORGE WALDRON, Esq., Surgeon, Bath.

I was sent for early in the morning of November 12th, 1848, to visit a Miss E., 37 years of age, of a dark and sallow complexion. I found her labouring under severe and violent pains in the epigastrium, accompanied with cramps of the extremities, a sharp and vibrating pulse, of little volume, and the body suffused with cold and clammy perspiration. Being informed that she had taken a pill late on the preceding night, and that to the effect of this pill she mainly ascribed her present sufferings and condition, I desired to see the prescription, and found it to contain,—Extr. Aloes, Extr. Rhei utr., gr. xij.; Extr. Nucis Vomice, gr. vj., in pil. xij. dividend. Capt. j. vel. ij., hora somni, alternis noctibus.

I directed a draught, with sulphuric ether and laudanum, to be immediately administered, and requested Mr. Taylor, my partner, to see Miss E. within the lapse of a few hours, and he then made the following note:—

Quarter-past 12 o'clock p.m. Saw Miss E., who still complains of great pain in the epigastric region; is unable to lie down, and has experienced no relief from the medicine prescribed by Mr. Waldron, this morning at seven o'clock; her countenance is contracted and anxious; she attributes to the pill taken at twelve o'clock on the preceding night the increase of pain, and believes it to be the cause of her present illness; pulse now imperceptible, with cramps in the extremities; cold and clammy perspiration; tongue dry and rugged; great thirst, and prostration of strength. Ordered, in conjunction with Mr. Waldron, Morphine Acetat, gr. ij.; Hydrarg. Chlorid., gr. xij.; Cons. q.s., ut fiant pil. vj. Capt. j., tertiis horis, in conjunction with an effervescing mixture. A mustard plaster to be applied over the region of the stomach for twenty-five to thirty minutes.

At 6 o'clock p.m. Miss E. expired, whilst taking a cup of tea.

Autopsy.—The body was spare and emaciated; on opening the abdomen the intestines bore marks of high inflammation, flakes of coagulable lymph were thrown out, and the intestines were everywhere united with their peritoneal covering; in the centre of the stomach, immediately between the greater and lesser curvature on the lower side, an ulcer, about the size of a shilling, was found, with indurated and thickened edges, and of dense and scirrhous hardness; on removing the stomach from the body, a second ulcer was discovered, completely agglutinated with the pancreas and peritoneal covering, and which it would appear guarded the second ulcer from giving way. A large quantity of fluid was found extravasated into the abdomen.

Observations.—As the case at the time excited some interest, it was in every respect well, that a *post-mortem* examination did take place. The suddenness of Miss E.'s death, the nature of the medicine she had taken late on the preceding night, and the impression on her mind and also that of her relatives, that this medicine was the cause of her death and sufferings, rendered the examination imperative. The *modus operandi* of such a combination, on an ulcerated surface, cannot

easily be calculated upon, and one would not desire to hazard an opinion; all that can be said is this,—that Miss E. took a pill of this character, and that next day she died. The examination of the stomach further shewed, that had she not taken the pill her term of days was numbered. Still the violent exacerbation of pain, &c., on the night after the pill was taken, might, and ought to lead medical men to the serious consideration,—how far such a combination of medicine was calculated to do good or harm in such a case, and so far prove beneficial to medical science.

3, Belmont, Bath,

February 9, 1849.

MENTAL INFLUENCE OF THE MOTHER ON THE CHILD

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND
SURGICAL JOURNAL.

SIR,

The mental influence of the mother on the fœtus was fully believed in the olden times, though discredited by medical philosophers of the present day; but general rules may admit of exceptions, and the occasional asserted instances of transmission to the child of maternal mental impressions, which come under the notice of medical practitioners, might be worth some investigation, though almost invariably shunned from the dread of the imputation of credulity or scientific heresy.

The case which I am about to mention certainly presents the semblance of a result of maternal mental influence rather than that of coincidence, and as I can vouch for the facts, they may perhaps be deemed worthy of record.

On the 24th of last October I attended Mrs. A. in her confinement with her fourth child. The labour was natural, and she gave birth to a fine boy, who, on examination was found to suffer severely from hare-lip and cleft palate towards the left side of the mesian line. The former children were perfect. Mrs. B., who I then considered fully six months advanced in pregnancy, saw the child from motives of curiosity. She informed me that she experienced no feeling of alarm, though somewhat surprised at the morbid appearance. I believe she saw the child accidentally on two or three subsequent occasions.

On the night of February the 1st, she herself gave birth to a very fine healthy female infant, quite perfect, but from the septum of the nose extending downwards to the left of the mesian line, and through the thickness of the labial convexity, the outline of a hare-lip was perfectly distinct; on and near the nasal septum small clots of varicose capillaries formed the apex of the figure, the outline then continuing downward with dark lines, and through the thickness of the labial margin a livid hue distinguishes the marked surface from the normal structure. The hard and soft palate are perfect and natural. The child is now a fortnight old, and the mark has faded considerably, and I hope will not disfigure it hereafter. If we are to recognize

cause and effect in this occurrence, it will be interesting to bear in mind the period of pregnancy at which the impression was made. Admitting a nervous connection between the mother and the fetus, that connection would doubtless become stronger after the middle of pregnancy, if indeed it may not be supposed first to date from thence—viz., the period of quickening, when the fetus is first endowed with motor power. In other cases of supposed maternal mental influence which have come within my notice, the impression has occurred subsequently to the period of quickening. This I should be inclined to anticipate. At the earlier periods of utero-gestation, while the fetus is as it were parasitically connected with the mother, its existence is most precarious, and its destruction is very apt to ensue from any severe maternal shock; but at the later periods, the being of the fetus is more certain and independent, and then probably it is, that the vital stimulus is transmitted by a nervous channel as well as in mere connection with the sanguineous current. If we allow the occasional occurrence of maternal mental influence on the fetus, it would also be a matter of curious speculation as to the circumstances under which it is liable to occur. I do not believe it to be always ascribable to violent mental influence: in the present instance such was not the case, and the mother is a very sensible woman, of lively and cheerful disposition, but not of very excitable and imaginative temperament; there was merely the visual impression combined with some degree of curiosity and surprise.

I am Sir, your obedient servant,

BUTLER LANE, M.D.

Ewell, Surrey, Feb. 12, 1848.

ON MESMERISM.

By HENRY DAYMAN, Esq., Surgeon.

It was the trite observation of a great painter,* that "the history of errors, properly managed, often shortens the road to truth." Now, although it may be impossible to manage properly a history of the errors committed in the healing art, because "*difficile est proprie communia dicere*," still we are not without excellent charts to guide our *Materia Medica* among the mysterious quicksands, which, in the shape of idiosyncrasies, prejudices, fantasies, and other difficulties, surround the life of man,—charts laid down by the learned and the good, in all ages, for the use of their children, and the behoof of mankind.

Grave men and honest have witnessed the wonders of mesmerism, and have borne testimony to the truth of what they have seen; this paper, therefore, will not be found attempting in any way to controvert the evidence of other men's senses; but, as the *whole* truth has not always appeared, I have thought it expedient, after some observation, to lay before the profession certain phases of the mesmeric treatment which hitherto have been but little considered.

It is not many years since the powers of iodine over glandular disease began to be developed, and numerous and lofty were the conjectures of physicians on the influence which such a medicine would hold in the republic of physic. At last some keen and close observers began to discover that this deep-searching agent, not content with removing diseased structure, would occasionally carry off the very normal tissue, and then it was deemed right to warn the profession of such possible contingencies. Thus have we heard, throughout the length and breadth of the land, the all-powerful virtues of mesmerism set forth; but medical men have not had timely warning, as in the case of iodine, of the dangers which may attend the indiscriminate use of this power.

The following sketches will, I hope, sufficiently illustrate my meaning:—

CASE 1.—A lady, subject to occasional attacks of turbulent action of the heart, out of mere curiosity, suffered herself to be mesmerised. Within a few minutes all the most frightful symptoms of angina pectoris began to show themselves, and it was with difficulty, and not until many hours had elapsed, that the circulation was brought back to tranquillity. The mesmeriser was an amateur, and altogether unacquainted with the principles of medicine.

CASE 2.—A girl, half-idiotic, yet of sufficient understanding to earn her own bread, was found to be a suitable subject for mesmeric exhibitions, from the facility with which she received the necessary impression, and her easy transit into a state of coma. After submitting to the ordeal for some months, she was discovered to have become *entirely* devoid of intellect, so that being deprived of all means of gaining a livelihood, or even of performing the most ordinary personal duties for herself, she now exists, a burden to her parish, and an object of distress to those about her.

CASE 3.—A young woman, of florid habit, and irritable temperament, about 25 years of age, was attacked by epilepsy, for which she consulted an eminent person. The treatment at first was of the most approved kind, for the doctor brought all the artillery of a very powerful mind to bear on the case. No remedies, however, succeeded in preventing the recurrence of the fits, and she was at last advised to try mesmerism.

Two years after this I saw her, when she informed me that the mesmeriser had "cured her fits," but, to use her own emphatic words, she was "a wretched woman." The epileptic paroxysm, which had habitually returned about every fortnight, ceased to appear, but in the place of this periodical outbreak, a pitiable wreck of nervous energy had taken possession of her, and both the mental and physical economy were laid prostrate, so that she constantly felt and declared, that the greatest boon which could befall her would be the restoration of the epilepsy.

The foregoing cases have been selected as specimens of mesmeric results, as they appeared under three different aspects; and I have no doubt that all medical men who have seen the mode of treatment in full exercise, and have studied, without let or hinderance,

* Sir Joshua Reynolds.

the evil and the good of the system, will recognize in these sketches truths with which they are familiar, however feeble the delineation here given.

The first case may be taken as the type of a numerous family of patients, on whom slight disturbances produce very serious results, and with whom, therefore, cautious men are not prone to meddle unnecessarily. It may, however, be urged, that the somatic manipulation was not carried far enough in this case, and that as the treatment proceeded, the primary symptoms would have subsided. On this head I would only refer to the opinion of an able psychologist,* who says, in speaking of the employment of animal magnetism, as a means to produce re-action in the nervous system, "This procedure demands great caution and individual discrimination, since, after all, it is only proceeding by guess. The physician may here be compared to one attacking the case with a stick. If he strike the disorder, so much the better; if he strike the patient, so much the worse. The question always is, how far may a psycho-physical exaltation go, in this or that individual patient, in order to produce only a *salutary* excitement, and where is the point at which this excitement may become *dangerous*? It never can be a matter of indifference: he, therefore, who will venture to give a decided answer to this question, as applied to the case which he is treating, may likewise venture on this procedure."

The second case presents a terrible picture of innocent martyrdom, on which it would be painful, and of no advantage, in this place, further to dilate.

The third case, perhaps, offers more interesting features to the consideration of the physician. Here, it is evident, it would have been better to have borne the actual ills, than to have sought unto the possible but questionable cure. The epileptic diathesis existed in the constitution, like the wolf-note on the piano, well known to musicians, and it would have been well, had both discords been equally capable of bearing the same treatment. In the latter, the judicious tuner distributes the note over the whole instrument, and the flaw is lost in the general harmony. Not so the mesmeric tuner, in the instance before us, for, although the diffusion of the epileptic discord was accomplished, the effect was the reverse of harmonious. It appeared as if some subtle spirit was habitually condensed in the body, and that the issue of this process was a periodical epilepsy, exhibiting, in some measure, a *vis medicatrix* analogous to that which is seen in the struggles of ague to throw off the poison of disease. Howbeit, the condition of the patient, after the "cure," was far worse than that in which the treatment had first found her. In the place of the epilepsy, the body was governed by what may be termed a *psycho-neurosis*, and the fear was upon all who saw the case, that such a state of things might lead, as Eschenmayer (himself an enthusiastic mesmerist,) has suggested, to some peculiar form of lunacy.

Such are a few among the *caveats* which may be entered against this popular therapeia. Hitherto

science has taken little cognizance of its merits: yet, "Thus much appears from the evidence examined, that what is called *idio-magnetism* is not a more exalted, but a more fettered state of the mind, in which it is subject to the will of other men,—to the sway of its own instinct and of fancy—nay, even to the influence of mineral and telluric forces. That this condition must be considered as *pathological*, cannot, therefore, be doubted."* It must, however, be confessed, that to regard the series of mesmeric phenomena as a state of morbid "transition," does not assist the physician in assigning to it a place in the healing art. To oppose one disease to another has been the legitimate province of *Allopathic* science from the days of "eldest time;" and some of the warmest advocates of mesmerism have, it is conjectured with this view, sought to engraft their doctrines on catholic medicine. Yet, whether, on investigating more strictly all the powers and results of animal magnetism, "*simile simili gaudet*," will not be found to be the more appropriate motto of the school, is at present an open question. Should the decision of future inquirers give this place to mesmerism, it is obvious that it would eventually become the handmaid of homeopathy.

I leave to others the purely psychical field to which a further consideration of this subject might lead. It has ever been the wisdom of the true metaphysician to look but in one direction for the light. Let us, then, who are both physiologists and metaphysicians, keep this truth steadily before our eyes in our profound reasonings on the material world. "*Physica sunt opaca, non lucem sed lucidas res videmus*."

Millbrook, Southampton.

CLINICAL NOTES FROM PRIVATE PRACTICE.

By W. H. RANKING, M.D., (Cantab.) Norwich.

REMARKABLE SPASMODIC AFFECTION OF THE MUSCLES SUPPLIED BY THE PORTIO DURA.

A lady, aged 65, residing in the marshy district, near Lynn, came recently to this city to take my opinion on an affection which had caused her very great distress, although not accompanied by any severe amount of pain. Her health had been generally good until twelve months back, when she became the subject of pain in the limbs, apparently of rheumatic origin. About the same time she first noticed the commencement of the affection for which she sought my advice, and which consists of a peculiar spasmodic twitching of all the superficial muscles in the left side of the face. This originated in the left genio-hyoid muscle, but had now engaged the orbicularis, the levator angulæ oris, the zygomatics, and in fact every muscle supplied by the portio dura, on the left side, and shewed a disposition to extend to the other side. The twitchings occurred at intervals of about one minute, and lasted during twenty or thirty seconds, so that there was scarcely any abatement during the day, and these

* Baron Von Feuchtersleben's *Psychology*. Sydenham Society's edition, p. 338.

* Op. cit., p. 209.

twitchings were so violent that articulation was impeded, and the patient was constrained to apply her hand to the cheek to restrain its motions. There was at the same time considerable lachrymation, but no pain, beyond a feeling of dragging from the abnormal muscular action.

I examined the patient carefully to discover some explanation of this unusual symptom, but could find none. There was occasional pain in the head and giddiness, but not more than is seen in ordinary gastro-hepatic derangement. There were no symptoms of paralysis, nor any affection of the special senses. I made out particularly that she had no noises or imperfection of hearing, and had never suffered from otorrhœa. The appetite was good, bowels regular, and in fact but for her distressing nervous affection, she would have considered herself well.

I ordered her quinine and steel, with belladonna frictions in front of the meatus auditorius, but have not heard the result.

I am induced to place this case on record from the belief that it is an affection of very unusual occurrence. I have consulted such works of reference as are at my disposal, but can find only one similar case, which Dr. Graves has narrated, ("Clinical Medicine," 2nd Ed., Vol. i., p. 571,) as an instance of a disease hitherto undescribed. His case was also that of a female, past the meridian of life, but it appears to have been of longer duration, and had invaded both sides of the face, as it seemed disposed to do in the present case. No account of the treatment or progress of the affection is recorded, nor is any explanation of the phenomena attempted.

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF PROFESSOR SANDS COX, F.R.S., SENIOR SURGEON TO THE HOSPITAL.

Reported by PETER HINCKES BIRD, late Resident Medical Officer.

CASE XV.

CANCER OF THE SCROTUM.

John Clark, aged 47, a sweep, was admitted into the Queen's Hospital, October 24th, 1846, under the care of Professor Cox. He states that about twelve months ago he first perceived a hard wart growing out from the left side of the scrotum, to the extent of two inches in length; he cut it off near to the scrotum with a razor; the raw surface ulcerated, and from the ulceration, according to his account, small lumps appeared, one after the other, "like a bunch of grapes." The ulceration gradually increased, until it attained the size of the bottom of a wine-glass, and then, (about three months ago,) it began to discharge a thick, green, and very offensive matter; it has not spread much

lately, but the pain has been most intense within this last month; it itches much, and when he scratches it, it bursts out bleeding slightly; he describes the blood as being pale. His health has always been very good. His parents appear to have died consumptive. He ascribes the disease to the irritation caused by the lodgement of soot in the scrotum. He is not subject to cough. Has tried caustics, but without any relief.

Present state:—There is a large ulcer, in size rather larger than the bottom of a wine-glass, with elevated, indurated, and irregular edges, situated on the left side of the scrotum, and occupying nearly the whole of the left side of this part, and extending to the junction of the left thigh with the scrotum; it appears to be spreading towards the right side, where are some indurated lumps, resembling those which appeared first on the left side. There is no appearance of granulations in the wound; the inguinal glands are indurated, and are also enlarged, and pain him much at times; he, however, states that the glands were enlarged previous to the appearance of the disease. He complains of much pain in the wound, described as lancinating, extending from the wound to the glands in the groin, and along the penis, and also down the thigh nearly as far as the knee; the pain is not constant, but is always worse at night; the pain sometimes shoots up as high as the ribs on the left side. The left testicle is not any harder than the right, which appears healthy, but it seems to be adherent to the scrotum, opposite to the ulceration; the spermatic cord does not appear to be affected. Pulse 86, full and regular; bowels open; tongue clean; appetite good; he sleeps indifferently at night, the pain preventing him from doing so; the discharge from the wound is thin, and of a yellow colour, very offensive, and tinges the cloths (he states,) of a blackish colour.

November 5th. The disease has slightly spread since last report, it occupies half of the scrotum, and is extending towards the lower part; the pain is much complained of at night; has been poulticing it lately, but it does not discharge much.

20th. Has been into the country for a short time, he returned this morning; the disease has made progress, having extended more towards the left thigh, and towards the lower part of the scrotum of the opposite side; the pain is rather worse, but his health is good; wishes much to have the disease removed. Pulv. Opii, gr. iss.; Conf. q.s. ut fiat pil. omni nocte.

21st. The operation for the excision of the diseased mass was performed by Mr. Cox in the following manner:—An incision was made on each side of the diseased mass, which was then dissected off from the parts beneath, so that both testicles were fully exposed; the left testicle was found adherent by its outer tunics to the diseased mass; these adhesions were next cut through, and the diseased scrotum removed. The left testicle was attentively examined; the outer tunics were found indurated, and apparently diseased, so that its removal was decided upon; pressure was made on the external abdominal ring, and the cord being exposed and isolated, a ligature was slightly tied around it and its vessels, and it was divided by placing the knife

underneath it, and cutting outwards; the cellular connections were separated with a few touches of the knife, and the testicle removed; three of the vessels of the cord required ligatures; another small vessel on the inner part of the thigh also required to be ligatured. There was but little of the scrotum left for the covering of the testicle, the edges of it were united by six stitches; strips of adhesive plaster were applied over these, and the whole supported by a T bandage. He bore this painful operation with great fortitude.

The diseased mass measured four inches by three inches, and weighed four ounces; the elevated indurated edges offered more resistance to the knife than the parts which they enclosed; the cut surface had a striated appearance, but did not glisten or exhibit the fibrous bands of scirrhus. A small portion examined under the microscope presented nucleated cells, and a number of granules, of a yellowish colour.

4 p.m. Has been sick, probably from the wine which he imbibed during the operation; complains of but little pain; pulse 120, soft; tongue clean. Mist. Salin., oz. iss., quartis horis. Broth diet.

22nd. Slept well last night; no sickness; complains of some slight pain in the wound; pulse 120, soft; tongue slightly coated; is rather thirsty; skin moist. Continue the medicines.

23rd. Feels pretty comfortable; some slight pain in the head; bowels not open; tongue slightly coated; pulse 118, soft; appetite good; the wound looks healthy, but discharges a foetid pus. Extra meat diet. Extr. Col. Co., (Palmeri), gr. x., hora somni sumendus.

24th. Wound looks healthy; there is some slight enlargement of the right testicle, which is well covered by the remaining part of the scrotum; pulse 110; tongue clean; slight pain in the epigastric region; slept pretty well last night; bowels open.

26th. Feels comfortable; tongue clean; appetite good; pulse 96, soft; sleeps well; complains of slight shooting pain in the wound; wound looks healthy. To be dressed with water dressing.

28th. Doing well; no increase in the swelling of the remaining testicle; sleeps well; there is some œdema of the prepuce; appetite good; tongue clean; pulse 97; bowels confined. Rep. Extr. Colocynth. Comp., gr. x., hora somni.

December 1st. Improving; bowels open; pulse 92; perspired a good deal last night; there is increased œdema of the prepuce; the wound is uniting, looks healthy, and discharges slightly.

3rd. An abscess has formed on the penis, just below the prepuce; it was opened, and some healthy matter let out; the edges of the wound on the scrotum have united at intervals, the intervening parts filling up by granulation; the wound looks healthy; pulse 90, soft; sleeps well; appetite good; bowels open.

9th. The swelling of the penis has quite subsided, and the abscess is healed; the wound is rapidly healing; does not complain of pain; general health good.

15th. Doing well; the wound is nearly healed over; no pain; health much improved.

19th. For the last three days he has complained of

jumping, afterwards aching, pain, in the right side of the scrotum; it much resembles the pain which accompanied the previous disease; pulse 108, small; feels low; the scrotum and penis appear inflamed, and feel hot. Ordered to keep the parts constantly damp with cold water.

23rd. Pain quite gone; inflammation subsided; the wound is nearly healed; health good.

27th. Better in every respect; is sitting up.

January 4th, 1847. Wound quite healed; general health good. Discharged cured.

May 20th. Presented himself at the Hospital; his health is much improved, and there is no symptom of any return of the disease.

September 6th. Was seen to-day in good health; there is not the slightest appearance of any return of the disease.

Chimney-sweepers are liable to two distinct affections of the scrotum, which, although they differ very greatly in their nature, and in their consequences, are yet constantly described as the same affection, under the name of chimney-sweepers' cancer.

Both of these affections are produced by the irritation which is caused by the accumulation of particles of soot in the moist rugæ of the scrotum, and it is not difficult to conceive why the disease should generally begin in that part; but true soot-wart has been seen in the face of a chimney-sweeper, just under the left eye, who had never suffered from the disease in any other part, though he said he had sometimes felt little hardiness in the scrotum, which, when they grew troublesome, he picked them off, but he had never perceived any sore, ulceration, or considerable hardness in that part. A case is recorded of this variety of cancer occurring in the right hand of a gardener, who for years had been in the habit of sprinkling soot over his flower-beds with his hands.

The most common of these affections of the scrotum consists in the development of tubercles, which subsequently become affected with uncontrollable ulceration.

The other affection, which is much less common than that just described, consists in the deposit of true carcinomatous matter in the texture of the scrotum, which subsequently ulcerates, and passes through its usual course. The fact of these two affections being constantly confounded, fully accounts for the discordant descriptions given by different authors of the course and consequences of the disease. Some authors affirm that the lymphatic glands scarcely ever become affected, while others on the contrary describe the inguinal and lumbar glands as being almost constantly contaminated. Again, with reference to the results of operation. Mr. Travers and others are of opinion that the disease will almost always return, even after the most extensive removal, while others consider the operation as being almost always successful.

If the disease be of the first-mentioned description, the lymphatic glands in the groin may become enlarged from irritation only, and the disease itself, if removed, will not reappear; but in the second class of cases, the lymphatic and lumbar glands become affected with

carcinomatous deposit, and the disease, if removed, will be almost certain to return.

The malignant form of the disease termed cancer scroti, is frequently hereditary. Mr. Earle has operated on a man whose grandfather, father, and brother, had fallen victims to this disease; and other cases of the same kind are recorded. It is said to be most common between the ages of 20 and 40. The ages at the time of death of nine persons, as recorded in the reports of the Registrar-General, are—28, 30, 32, 38, 45, 48, 50, 54, 60. Sir James Earle mentions a case in a lad under eight years of age; and Mr. Samuel Cooper has seen a case in a boy not more than sixteen.

The average duration of this disease has not yet been ascertained with accuracy; it varies, however, from some months to several years, and its fatal termination is sometimes hastened by hæmorrhage, owing to the destruction of the coats of an artery.

Removal of the diseased parts by the knife is the only efficacious method of treating both the affections which are described as cancer of the scrotum, and should be at once resorted to in all cases of the non-malignant variety, and also in all those cases of true cancer scroti in which the disease has not made much progress, and where the spermatic cord and inguinal glands are not obviously affected.

In the above case so much of the scrotum was removed, that even the remaining testicle had scarcely sufficient covering. This, Mr. Liston states, is of little consequence, for the glands soon receive a covering at the expense of the surrounding healthy skin, together with the cicatrix formed by the granulations; in fact, Mr. Liston says, the removal of the whole scrotum would be supplied by a very effectual substitute. This is perhaps accounted for by the fact that the testicles are supplied with blood from a part of the body very distant from that which supplies the scrotum.

The removal of the left testicle was quite necessary in the above case; it had a very suspicious appearance, and the small speck noticed upon it, at the spot where it was adherent to the scrotum, was probably an extension of the disease.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, MARCH 7, 1849.

Owing to the importance of the late meeting of the Poor-Law Medical Officers, and our desire to give as full an account as possible of the proceedings at and connected with the meeting, we are compelled to limit any observations which we might otherwise have had to make on the subject, to a very brief recommendation of it to the serious consideration of all who are interested in its settlement. At the same time we would request the attention of the Members of the

Provincial Medical and Surgical Association, (many of whom are Poor-Law Medical Officers, and all of whom we believe to be deeply impressed with a sympathizing feeling for the degradation, insults, and oppression, to which so numerous and meritorious a portion of our medical brethren are continually subjected,) to the letter of Mr. Martin of Reigate, on the bearings on this question, of a reform, or rather reconstitution, of all our medical institutions. Mr. Martin is, we feel assured, correct in the position which he has taken up, and it is with reluctance that we content ourselves with this brief reference to his letter and the resolution proposed by Mr. Wyld. Both, however, speak sufficiently for themselves, and for the rest our readers are but too well acquainted with the imperative necessity which exists for a speedy alteration of the present most unsatisfactory and worse than unsatisfactory position in which the entire medical profession is placed.

Reviews.

Surgical Anatomy. By JOSEPH MACLISE, Surgeon. FASCICULUS I. London: Churchill. Folio. Plates.

We are informed in the preface that "the object of this work is to present to the student of medicine and the practitioner removed from the schools, a series of dissections demonstrative of the relative anatomy of the principal regions of the human body." Such is, indeed, the main utility of all representations of this class, for, as the author subsequently observes,—"An anatomical illustration enters the understanding straightforward in a direct passage, and is almost independent of written language. A picture of form is a proposition which solves itself," and "the best substitution for nature itself, upon which to teach the knowledge of her, is an exact representation of her form." Hence a work like the present, which represents with truth and fidelity the forms which nature reveals, is equally calculated to indicate to the inexperienced student what he is especially to look for, and to recal to the recollection of the practitioner, and to assist in impressing on his mind, those lessons which he had before imbibed, but which the lapse of time, and the multitude of objects of various descriptions ever pressing on his attention, tend much to weaken or efface.

"Every surgical anatomist," says the author, "will (if he examine himself,) perceive that previously to undertaking the performance of an operation upon

the living body, he stands reassured and self-reliant in that degree in which he is capable of conjuring up before his mental vision a distinct picture of his subject."—"The unbroken surface of the human figure is as a map to the surgeon, explanatory of the anatomy arranged beneath;"—"We dissect the dead animal body in order to furnish the memory with as clear an account of the structure contained in its living representative, which we are not allowed to analyse, as if this latter were perfectly translucent, and directly demonstrative of its component parts.

These observations speak for themselves, and need no comment. It is sufficient to say that the manner in which the author has carried out his design is such as completely to fulfil the intention. The fasciculus before us consists of four plates, each containing two figures, with a commentary and description attached. The subjects of the four first plates are—1. The form of the thoracic cavity, and the position of the lungs, heart, and larger blood-vessels. 2. The surgical form of the superficial, cervical, and facial regions, and the relative position of the principal blood-vessels, nerves, &c. 3. The surgical form of the deep cervical and facial regions, and the relative position of the principal blood-vessels, nerves, &c. 4. The surgical dissection of the subclavian and carotid regions, and the relative anatomy of their contents.

It will thus be perceived that the physician is almost as much interested in this work as the surgeon, and we have only to add in conclusion, that while in the fidelity and correctness of the representations, and in the beauty of the delineations, it is surpassed by no work which we have seen, its price is so low as to bring it within the reach of all. Nothing but a large circulation can secure either to author or publisher that remuneration which its great excellence, and the manner in which it is got up, so justly deserve. The best we can desire for both parties, as well as for the benefit of the profession, is that the circulation may be equal to the merits of the work.

Proceedings of Societies.

SHEFFIELD MEDICAL SOCIETY.

Fifth Meeting, Nov. 30, 1848.

The President, Dr. BARTOLOME, in the Chair.

SCIRRHOUS PYLORUS, WITH ABSCESS OF THE LIVER.

Mr. Porter exhibited the stomach and a portion of the liver of a man, aged 58. Until the last year or two his habits were intemperate; he became a dispensary patient four months ago. There was much emaciation, and he complained of pain at the pit of the stomach, which was not much aggravated by taking food. He had no vomiting until two days before his death, and then, according to his wife's account, he ejected "what was like matter from an old abscess." No distinct tumour could be felt in the epigastrium. The liver was

hard and easily felt. The case was considered to be scirrhus of the liver. On *post-mortem* inspection the stomach and liver were found to be united by a very firm adhesion, and in their removal the finger passed into an abscess of the left lobe, and penetrated the mass of scirrhus at the pyloric extremity of the stomach, which adhered to the under surface of the left lobe.

OVARIOTOMY.

Dr. Branson gave an account of a case of ovarian disease, for which the operation of ovariectomy was performed by Dr. Clay, of Manchester. Dr. Clay was present at the meeting, and at the conclusion of the paper gave a full account of the results of ovariectomy in his own practice.

The patient was a young lady, just turned eighteen, at the time of the operation, and the disease had then existed three years. She first remarked a small tumour in the right groin, in the spring of 1845; this slowly increased in size, and at length occasioned considerable alarm to her friends. The tumour was pronounced to be ovarian, and was tapped January 5, 1847. This was followed by great relief; it enabled her, comparatively speaking, to enjoy life, and even to take a moderate amount of exercise. Her general appearance at this time was tolerably healthy, and there was no loss of flesh. A portion of the tumour was evidently solid, and could be felt after the tapping, in the opposite side to which it had been felt in previously, thus proving the mobility of the tumour. This comfortable state gradually gave place to a repetition of the previous symptoms, and in the spring of 1848 the tumour had again become so distressingly large, as to necessitate another tapping on the 24th of April. The relief now experienced was very transient; the tumour filled again rapidly, and on June 5th, six weeks only after the previous tapping, the operation was again performed. Her strength now began to fail; she could not walk more than a hundred yards without fatigue, and was obliged to be wheeled about in a garden chair. The complexion continued so healthy, as to preclude the suspicion of malignant disease; and as she had never suffered from much pain in the tumour, beyond the inconvenience arising from its bulk, there was no reason for supposing that any peritoneal inflammation had at any time existed. Still she grew thinner, and her finger rings became too large for her, a positive proof that the process of absorption was now going on rapidly. About ten days after the last tapping, on June 5th, the wound made by the trocar spontaneously re-opened, and a considerable discharge of fluid took place, and continued, more or less, for some days. The discharged fluid was most probably ascitic, for the general size of the tumour was not very materially diminished by its evacuation. The catamenia had never appeared. The advice of Dr. Clay was now sought, and Dr. Branson met him in consultation. The abdomen seemed as much distended as in the last period of pregnancy. A solid tumour, of a somewhat oblong form, supposed, by Dr. Clay, to weigh five or six pounds, was distinctly felt rising upwards, from the situation of the right ovary; two other sacs were supposed to exist, one of moderate size which occupied the umbilical region, and one much larger which occupied nearly the whole of the left side of the abdomen. It was thought that the

smaller sac only had been pierced at the last tapping. The whole tumour was certainly moveable, and as traction of the tumour from various points produced no sense of dragging or pain, Dr. Clay was satisfied there existed no formidable adhesions. A careful uterine examination was also made, and the uterus was pronounced free from disease, nor could any trace of disease be detected in any other vital organ. All these circumstances having been taken into consideration, Dr. Clay gave a decided opinion that the case was a fair one for operation, at the same time it is only justice to him to say, that there was no concealment whatever on his part, from the friends of the patient, of the great danger attendant upon the operation, nor was the dark side of the picture ever tempered with a specious colouring. At length, after anxious consideration, it was determined to state the case candidly to the young lady herself, leaving the decision of the question to her alone, and the issue in God's hands. She resolved, with calm determination, to submit to the operation, and steadily looked forward to the hazardous prospect of relief with unwavering firmness.

The bowels having been carefully regulated for some days previously, and the general health being in as satisfactory a state as could, under the circumstances, be expected, Dr. Clay commenced the operation in a room properly heated for the purpose, the patient being under the influence of chloroform. It was previously agreed upon that a small exploratory incision should first be made, and in the event of any formidable adhesions being met with, the wound was to be immediately closed, and the operation abandoned. This was carefully done; a considerable quantity of ascitic fluid escaped, and as no adhesions whatever could be felt on the anterior surface of the tumour, the wound was rapidly enlarged upwards and downwards, to the extent of about nine or ten inches. This brought the tumour fairly into view, bulging out from the lips of the wound. To lessen the bulk of the tumour, the largest cyst was punctured, and about five or six pints of gummy glairy fluid drawn off, very different in character from that which escaped spontaneously after the last tapping. On attempting to raise the mass (for the solid portion of the tumour was larger than had previously been imagined,) it was found to be tied down posteriorly to the omentum by several bands of lymph, and at one point it was adherent to the bowel. These adhesions were easily peeled off; the pedicle was grasped and tied with a double ligature, and the tumour separated and removed. The wound was then rapidly closed, and held together by six or seven interrupted sutures, the whole operation occupying fifteen minutes, and in little more than twenty minutes' time from the commencement of the operation, the bandages were applied, and the patient again in bed. The action of chloroform was apparently most satisfactory; she lay as in a calm sleep, perfectly unconscious, till nearly the last suture was introduced, when she awoke, and expressed great thankfulness that the operation had been so painlessly performed. For the first twenty-four hours all went on well; she was cheerful and comfortable, and complained of no pain nor uneasiness whatever; there was no thirst nor sickness, and the pulse, which had never been less than 100 for some time before the operation,

was scarcely accelerated; the urine was passed naturally, and she enjoyed several hours comfortable sleep. The rest is soon told. At the end of twenty-four hours the pulse was quicker, though not of a character to indicate inflammatory action, or to justify depletion. The bowels had not acted, still there was no abdominal tenderness, the skin was soft and moist, and the countenance remained free from any indication of distress. She spoke, and smiled cheerfully; even thirty hours after the operation she was thought to be progressing favourably; the system, however, was now becoming alarmed; the breathing was somewhat quickened, the pulse had become rather more frequent, and she had vomited two or three times. There was still no action of the bowels. At four o'clock in the morning, thirty-eight hours after the operation, she became suddenly worse; she complained much of flatulency, the countenance was anxious, the respiration hurried, and to these unfavourable symptoms was added general restlessness; this was followed by rapid sinking, and she died forty-four hours after the operation, apparently from the shock of the operation, and not from peritoneal inflammation.

The solid portion of the tumour was found to exceed considerably all previous calculation; it passed backwards towards the spine, thus rendering external manipulation of little avail in calculating its bulk. It weighed twelve pounds; and as about six pounds of cystic fluid, and at least nine or ten of ascitic fluid, were also drawn off, the abnormal contents of the abdomen must have amounted to nearly thirty pounds. The tumour did not consist, as was supposed, of a solid mass, and two separate cysts, but was made up of innumerable cysts, varying much in size, from that of a pea, to one containing several pounds. The solid portion was also composed of cysts, containing a semi-fluid, dark-coloured, grumous, and brain-like matter; it is evident, therefore, how small an amount of relief would be gained by tapping.

Dr. Branson first noticed the propriety of the operation about which so much difference of opinion exists. The question seems to turn upon the probable duration of uncontrolled ovarian disease. There are legitimate operations in surgery as fatal as ovariectomy, but they are nearly all performed in the hope of averting certain and immediate death, whereas the operation of ovariectomy must ever encounter the risk, even in the best selected cases, of shortening a life which might have been prolonged to an indefinite period. Those who have paid the greatest attention to the statistics of ovarian disease, place the average duration of the complaint at little more than three years. Exceptional cases are met with, in which the constitutional symptoms are trifling, the patient suffering only from the bulk of the tumour. These cases so obviously unsuitable for ovariectomy, may be excluded from the question. Is, then, an average duration of three years sufficient to justify the operation? Have we, under any circumstances, a right to hazard an operation which may probably thus much curtail life? A combination of the following circumstances seems to answer the question in the affirmative,—viz., when the tumour is large, partially solid, or composed of numerous cysts, the walls of which require a large amount of blood for their nutriment;—when tapping ceases to afford relief

and the growth of the tumour is rapidly going on at the expense of the general system as evidenced by the loss of flesh;—when the uterus is perfectly free from disease and there is no evidence of mischief in any other vital organ;—when the tumour is clearly moveable, and no evidence of previous peritoneal inflammation exists;—when no relief can be obtained by any other means;—when medicines are powerless, and subcutaneous sections and small incisions useless;—when the patient herself, after a full and candid explanation of its dangers, prefers to submit to the hazard of an operation with the chance of a perfect cure, rather than linger out a painful existence for a few short months—then, and then only, ought the operation to be performed. The difficulty of diagnosis in some cases and the impossibility of deciding with certainty upon the presence or absence of adhesions must ever prove the greatest obstacles to the reception of this operation by the profession. With regard to adhesions the case just related proves too plainly that no amount of skill or experience can decide the question even with the aid of an exploratory incision. The tumour may be perfectly moveable, it may roll easily under the fingers, and yet be bound down posteriorly by firm adhesions. The mobility of the tumour, the best test we have, only proves the non-existence of adhesions between the tumour and the abdominal walls; a posterior adhesion, it is evident, will admit of lateral motion, and form a hinge on which the tumour may turn. The presence of ascitic fluid may be considered rather favourable than otherwise, since it tends to prevent that close contact between the tumour and the abdominal walls so necessary for the formation of adhesions. As the size of the tumour in this case rendered a large incision absolutely necessary, Dr. Branson did not discuss at any length whether a large or small section is to be preferred. The danger does not appear to be materially increased by the length of the incision, and the facility which the large incision affords to the operator of grasping and tying the pedicle is a strong argument in its favour. Besides, it is questionable, whether cases which admit of operation by the small incision are suitable for the operation at all. Ovariectomy should ever be considered as the last resource of our art, and be restricted to solid rapidly-increasing tumours, or tumours composed of numerous cysts, at a time when tapping is powerless for relief, and early death certain. It is true, that a simple unadherent cyst may be punctured and withdrawn through a small abdominal opening; yet, here there can be no certainty that the case might not have proved one of those exceptional cases in which life is prolonged for a considerable period without the hazard of a peritoneal section. Dr. Branson, in conclusion, expressed his best thanks to Dr. Clay, for courteously allowing the use of a case, which more properly belonged to him, and instanced it as an additional proof to those already existing in his useful journal, that concealment of the results of ovariectomy formed no part of Dr. Clay's policy.

Dr. Clay then gave an account of the results of ovariectomy in his own practice. He said the operation had been brought under his notice by Mr. Lizars in 1822, and in 1842 he performed his first operation. His three first operations were successful. He had now

opened the abdominal cavity 39 times. Dr. Clay gave the following analysis of the results of his operations:—

- 1—Purely uterine; fatal immediately after the operation; diagnosed correctly as fleshy tubercle of the uterus; the tumour weighed twenty-seven or twenty-eight pounds.
- 1—Large uterine tumour with ovarian disease. Fatal.
- 1—Large ovarian tumour with enlargement of the uterus. Tumour and uterus removed. Fatal from the effect of a fall on the fourteenth day after the operation. The incision had healed, and the patient was apparently convalescent.
- 5—Exploratory only; the operation not proceeded with; of these, four recovered, and one died twenty days after the operation.
- 31—Cases of uncomplicated ovarian disease. Of these, 22 recovered and 9 died. One has since died of fever, five years after the operation.

Recoveries (including exploratory incisions) 26.
Deaths 13.

Dr. Clay was rather doubtful as to the value of chloroform in ovariectomy. The two cases in which he had used it were both fatal. In other operations he had used it with the best results. He had less dread of adhesions now than formerly, and he would now have completed the operation in three out of the five exploratory cases in which the operation was abandoned. On meeting with a very firm adhesion, he would in future adopt the plan of cutting round the adhesion, leaving the adherent portion of the sac attached to the abdominal parietes, omentum, or bowel. The majority of cases of ovarian disease are situated in the right ovary. He had examined nearly five hundred cases, and four fifths were of the right ovary. He considered that tapping should be deferred as long as possible; when once performed it must be repeated more and more frequently till it becomes necessary every ten or fifteen days. Dr. Bird's plan of a small incision is not applicable in large and solid ovarian tumours, or where any adhesions exist; nor could Mr. Brown's plan of compression succeed in large and solid tumours. Three of Dr. Clay's cases were successful from the ulcerative process, the removal of the disease being impracticable. He considered the temperature of the room at the time of the operation of the greatest importance; the operation should never be commenced if the temperature of the room is below 71 or 72 degrees, and on this account he preferred a small room to a large one for the operation, as being more readily heated. One of Dr. Clay's patients became pregnant after the removal of one ovary, thus proving the sufficiency of one ovary for the process of conception. He regarded the third and ninth days after the operation as peculiarly critical.

CONVENTION OF POOR-LAW MEDICAL OFFICERS.

The general meeting of Poor-Law Medical Officers took place, according to previous notice, on Monday, February 19th, at the Hanover Square Rooms, the Right Hon. the Lord Ashley in the Chair.

The Noble Chairman, on opening the proceedings, remarked—No one could read the copious evidence taken in 1844 by the Committee of the House of Commons, of which he was Chairman, on the subject of medical relief for the sick poor, without coming to the conclusion that the relief afforded to them was insufficient, and the remuneration which was granted for medical services inconsistent with the honourable position which professional gentlemen occupied. He had always been of the opinion which he had stated on that Committee, that the medical officers appointed under the Poor-Laws could not properly discharge their onerous duties unless they received an income suitable to the laborious offices they had to perform, and were rendered independent of the caprices of the Boards of Guardians. They should be enabled to occupy the position of persons who, knowing that they had grave and arduous functions to discharge, should be responsible to professional authority and supervision, instead of being subject to the capricious control of men often ignorant, and sometimes insolent. He thought, also, that their situations ought to be permanent, for their duties were of the most complex and burdensome kind, and the cases which they encountered in their practice demanded a greater degree of responsibility and labour than fell on those who were engaged in administering medical aid to the higher classes; for it was a recognized fact, that not only were the most complicated cases in medicine and surgery found among the working people, but their treatment was rendered more difficult, in consequence of the previous habits and mode of life of the patients. When, therefore, they found gentlemen of education and character entrusted with the charge of perhaps ten or twenty thousand persons, and paid by a miserable pittance scarcely sufficient to provide the necessary medicines, their position became an insult at once to the poor and to the profession to which they belonged. He trusted, therefore, that they would henceforward persevere in maintaining the organization they had formed for the assertion of their claims, and continue to press on the Legislature the propriety of introducing a system which would enable them to render to the poor the amount of relief demanded not merely by justice, but by the first instincts of humanity. He would be most happy to render them all the assistance in his power to advance their cause. He would not promise to undertake any legislative interference for them; but if he could be of service to them in any other way than by the introduction of a legislative proposition, which the present amount of his parliamentary duties forbade him to undertake, they should find him ready to support them, because he felt that he would be serving not merely the numerous class of medical men discharging duties under the Poor Law Act, but the far more numerous class of the suffering, sick, and destitute poor.

Mr. C. F. J. Lord read a report from the committee appointed at a former meeting, from which it appeared that they had received from district surgeons 805 reports as to the working of poor-law medical relief. It was also stated that the most encouraging assurances of good fellow-feeling had been received by their deputations to the Colleges of Surgeons and Physicians and the Society of Apothecaries. The account of the interview between

members of their profession and the Secretary of State for the Home Department and the President of the Poor-Law Commissioners, was adverted to, and the profession was reminded that the President of the Poor-Law Board had stated, that he was inclined to consider medical relief as *a question distinct from ordinary poor-law administration, and one which should be put on a separate and more comprehensive footing.* At the meeting of the Provincial Medical and Surgical Association, which was held last autumn, at Bath, they had also received encouragement and promises of co-operation. The report stated that out of the £8,000,000 raised for the nominal relief of 3,000,000 of poor, the largest amount divided in any one year among the 3000 gentlemen engaged in administering medical relief to them was £175,000, in return for journeys through the country, medicines, professional skill, &c. ! The cost of drugs required in each case of illness attended in hospitals was 4s. 2d.; in dispensaries, 2s. 5d.; while in urban unions only 1s. 6d. was allowed, and in rural unions, 2s. 2½d. The opinion of Sir George Grey was quoted, "that the question of expense was subordinate to what was necessary to secure efficient medical relief." A statement of receipts and expenditure of the committee was appended to the report, from which it appeared that the subscriptions received had been insufficient to cover the outlay, and that a sum of £22 17s. 9d. was due to the treasurer.

The report was then received and adopted.

Moved by Wm. Lobb, Esq., seconded by Peter Martin, Esq., of Reigate, and resolved unanimously :—

"That the evidence laid before this Convention and the correspondence of its Committee, prove an universal and increasing dissatisfaction among the medical officers of unions,—that how much soever the Poor-Law Board may feel the necessity of altering the present vicious system of poor-law medical relief, they are so hampered by the Boards of Guardians, that they are unable to carry into operation the very measures which they have deemed to be right; there is, therefore, great cause for the medical profession, and the poor-law medical staff more especially, to seek directly, from Parliament, redress from the hardships and injustice under which the sick-poor and the union surgeons are suffering while the present system continues, it is therefore urged, that as the Government at present pay half the medical salaries, it is expedient that it should pay the whole, and remove from Boards of Guardians the power to interfere with wise regulations and salutary improvements."

Mr. Martin observed that there was a strong feeling among the profession in favour of placing the whole charge for medical relief on the consolidated fund, and thus depriving the guardians of any ground for the idea that all the money paid to surgeons came out of their own pockets. The present time was favourable for attempting the change, and if that first step were taken, other ameliorations would very soon follow. The resolution then passed unanimously.

Moved by John Liddle, Esq., seconded by James Lord, Esq., and resolved,—“That the plan for an improved system of medical relief, suggested by the Committee of the Convention, and laid before the government in their memorial to the Right Hon. Sir George Grey, contains the three important principles which are best calculated to render any system acceptable to the medical profession, and in the highest degree useful to the poor,—viz., *payment proportioned to duties, permanence of appointment, and responsibility to professional authority.*”

Mr. Liddle believed it was admitted universally, that so long as medical officers were subject to the control

of Boards of Guardians, there was no hope of improvement in their condition. They knew nothing of the labour, expense, and sacrifices by which professional competency was attained, and they thought that men were sufficiently paid by the honour of being elected to the office! A great number of surgeons were elected annually, and if they ran counter to the guardians, by recommending more relief from the workhouse than they liked, they very soon said to them, "We know what to do with you next year." In support of the opinion that the most proper authority to which they could be subjected was professional authority, he quoted Dr. Southwood Smith, who recommended that the inspection and supervision which worked so well in military hospitals, should be extended to union surgeons, and expressly stated that the Boards of Guardians were altogether incompetent—nay, that there were occasions when the Poor-Law Commissioners themselves would be in need of the advice and assistance of a qualified superintending medical officer.

Moved by Dr. Sibson, seconded by Edward Bainbridge, Esq., of Tooting, and resolved,—“That the Board of Health having imposed upon the Poor-Law Medical Staff, through powers given in the ‘Nuisance Removal and Diseases Prevention Act,’ new duties of a distinct kind, relating to sanitary purposes, without providing payment for the same, this meeting claims protection against such exaction.”

Mr. Wyld, M.P., here addressed the meeting on the topics embraced by the resolutions, and proposed a motion for the total reform of the profession, but which, not having been submitted to the Committee previous to the meeting, was not put from the chair.

Moved by Edward Daniell, Esq., of Newport Pagnell, seconded by Henry W. Livett, Esq., of Wells, Somerset, and resolved,—“That a petition be presented to Parliament, praying the Legislature to pass an Act embodying the principles alluded to in the previous resolutions, and that the members of the medical profession, the poor-law medical staff more especially, and all others interested in behalf of the sick-poor, in improving the present system of poor-law medical relief, be requested to use their utmost personal influence with members of Parliament for the attainment of this object.”

Moved by William Cantrell, Esq., of Wirksworth, seconded by J. S. Soden, Esq., late of Bath,—“That a Committee shall still be maintained, for which purpose the following gentlemen be re-appointed, with power to add to their number:—

Thomas Hodgkin, M.D., *Chairman*, Lower Brook Street, Grosvenor Square.

Thomas Martin, Esq., *Treasurer*, Reigate.

Charles F. J. Lord, Esq., *Honorary Secretary*, Hampstead.

Adolphus Barnett, Esq., Limehouse; John Liddle, Esq., Alie Place, Goodman's Fields; William Lobb, Esq., Aldersgate Street; George Ross, Esq., Farrington Street; Josh. Thomas Mitchell, Esq., Kennington; James F. Vallance, Esq., Stratford; Edward White, Esq., Lamb's Conduit Street; James Heygate, Esq., M.D., Derby; Peter Martin, Esq., Reigate; Edwd. Boulger, Esq., Blechingley; Geo. Bottomley, Esq., Croydon; Wm. Cantrell, Esq., Wirksworth, Derby; Edward Daniell, Esq., Newport Pagnell; Alfred Ebsworth, Esq., Bulwell, Notts; John Burton, M.D., Walsall, Stafford; Thos. Parker, Esq., Woburn, Beds; Rich. Thos. Tasker, Esq., Melbourne, Derby; Henry W. Livett, Esq., Wells, Somerset; John A. Pearson, Esq., Woolton, Liverpool; James Stedman, Esq., Guildford; Thos. H. Smith, Esq., St. Mary's Cray; and that it is essentially necessary that a more liberal

contribution be solicited from the Poor-Law Medical Staff, and the profession generally, to sustain the objects of the Convention, otherwise it will be impossible for the Committee to continue their exertions.”

Moved by C. M. Thompson, Esq., of Westerham, seconded by James Stedman, Esq., Guildford, and resolved,—“That this Convention publicly records its sense of obligation to the Colleges of Physicians and Surgeons, the Society of Apothecaries, and very prominently to the National Institute of Medicine, Surgery, and Midwifery, and the Provincial Medical and Surgical Association, as also to the medical and general press, for the support which all have rendered to the Poor-Law Medical Officers and the sick-poor, a continuation of which co-operation and advocacy is earnestly requested, until the objects of the Convention shall be happily realized.”

Moved by James Vallance, Esq., of Stratford, seconded by Dr. Barnett, and resolved,—“That the thanks of this meeting are eminently due, and are hereby given, to its eminent Chairman, Lord Ashley, for his unceasing efforts to benefit the sick poor. And having full confidence in his Lordship as to his desire to see justice done to medical officers of Unions, this meeting earnestly requests his Lordship to kindly undertake the advocacy of the cause of the sick poor and of the Poor-Law Medical Officers, in Parliament or otherwise, in such manner as to his Lordship may seem most advisable, in order to obtain a final adjustment of the long agitated question of the Poor-Law Medical Relief.”

Moved by William Lobb, Esq., seconded by C. F. Lord, Esq., and resolved,—“That the thanks of this meeting are eminently due, and are hereby given, to Dr. Hodgkin, for his urbane and able conduct in the chair of the Committee, and for his long advocacy of the cause of the Poor-Law Medical Staff.”

It is with regret that we have been unable to find room for the eloquent speech of Mr. Daniell of Newport Pagnell, and to report the proceedings generally at greater length; but being desirous of giving insertion to the subjoined digest of some of the communications made to the Committee, drawn up by Mr. Lord, the Honorary Secretary, we have thought it more advisable on the present occasion to confine our account of the meeting to the notice which has appeared in the columns of the *Lancet*.

ABSTRACT OF COMMUNICATIONS MADE TO THE COMMITTEE.

Mr. Armitage Pearson, of Woolton, one of the first opposers to the exactions made upon medical officers by the recent sanitary regulations, issued by the Board of Health, forwarded from the West Derby Union a *protest*, signed by thirteen medical officers, against the imposition of such duties, and another of a similar character from the Prescott Union with five signatures attached.

In the first of these documents, the disclaimers pronounce the regulations in question to be “*such as sacrifice their rights, not only as medical officers but as private citizens*,” the second declares such exaction of services to be a “*violation of their contracts and an infringement of the just rights of all Union surgeons*.”

Mr. W. H. Smith, of St. Mary's Cray, unable to be present from indisposition, drew the attention of the Committee, by letter, to an assurance made by Lord Lansdowne, in his place in the House, that “*the Government were pledged by him, that sanitary duties should not be required without being paid for*.” Mr. Smith adds, that “*Lord Wynford is ready at any time*

to question Lord Lansdowne on the matter in the House, should a necessity arise."

The following copy of a resolution, passed at a meeting of the medical officers of the Bakewell Union, held on the 13th instant, was presented by Mr. Cantrell, of Worksworth, a gentleman who, from the commencement of the present agitation, has been most zealous in furthering the objects of the Convention:—

"That the full concurrence of this meeting be given to the objects and intentions of the Poor-Law Medical Convention, and that Wm. Cantrell, Esq., be deputed to attend the meeting of the Poor-Law Medical Officers, to be held in London on the 19th instant." Similar resolutions were also presented by Mr. Cantrell from the Belper and Ashbourne Unions.

A letter was received from Mr. Wakley, M.P., intimating his intention to attend the meeting, who, however, from some unassigned cause [We regret to state, from illness] was unable to be present.

The President of the Provincial Medical and Surgical Association, Mr. Norman, of Bath, being unable to be present at the general meeting, and feeling kindly alive to the objects of the Convention, obtained a substitute in the person of Mr. Soden, formerly of that city, who obligingly attended, and represented him on the occasion by seconding the fourth resolution.

Dr. Cowan, of Reading, a member of the Council of the Provincial Association, and a warm advocate of the cause of the Union Surgeons, wrote expressing his regret at being prevented from attending and raising his voice in furtherance of the objects of the meeting.

Mr. Torrance, of Rugby, attended on behalf of five colleagues,—medical officers of the Rugby Union, and, in tendering a contribution from each, assured the Committee of the sympathy and thankfulness with which they noticed their exertions in furthering the interests of the Union Surgeons.

A letter was received from Mr. Hardwick, of Hempsall, Norfolk, expressing hearty interest in the proceedings of the Convention, enclosing a contribution, and subscribing himself "A much injured surgeon, and sincere well-wisher of the cause." A similar communication was also received from Mr. Highmore, of Sherborne, who fully agreed in the importance and necessity of the meeting, and promising a "renewal of his subscription, that the Union Medical Officers, by united efforts, may obtain redress of their grievances, by being properly recognized and required."

A communication from Mr. Collins, of Kenton, informed the Committee that the medical officers of St. Thomas's, Exeter, had memorialized the Guardians on the subject of their grievances, which had been laid before a Committee appointed to consider and report upon its merits; but that the memorialists had succeeded in obtaining only a trifling increase of salary for the medical officers attached to two or three remote parishes, out of forty-nine composing the Union.

Mr. Sawyer, of Alfriston, wrote, informing the Committee that he was connected with two Unions, and states as follows:—"That, having remonstrated with the Guardians of the West Fife Union on the inadequacy of 3s. per case, as a remuneration for my services, the mileage being three on an average, and in consequence of another Medical Officer of the Union declining to attend any longer, the Workhouse containing 100 inmates, at a salary of £10 per annum, the Guardians have advertised the whole Union, including the Workhouse, at £3 less than the present inadequate salaries; I do not think, however, they will succeed in getting any one who will have the hardihood to undertake duties it is physically impossible to perform. But it proves the

necessity of our urging upon the Legislature and the Poor Law Board our right to hold these appointments permanently, and the justice of being fairly remunerated for very onerous duties."

A strong letter was received by the Secretary of the National Institute, from Mr. Gibson, of Ulverstone, one of the Members of Council, in which he states, "that, although unconnected with any Poor-Law appointment, I highly approve and appreciate the motives which have actuated the Union Surgeons in endeavouring to obtain from the Legislature a redress of their grievances; the present system is most oppressive and injurious to the medical profession and to the poor, also a great calamity and dishonour to a Christian country, as well as being based upon a principal of false economy."

The following gentlemen attended the meeting as delegates:—Mr. Wm. Ingle, on behalf of the medical officers of the Ashby-de-la-Zouch Union; Mr. Watkins, of the Towcester Union; Mr. Jordison and Dr. Corbet, as representatives of the Medico-Chirurgical Association, for the Billericay, Romford, and Orsett Unions.

Several other letters were also received from different parts of the country, the writers testifying their approbation of the course pursued by the Committee, and a general interest in the proceedings of the Convention.

Enough has been said to manifest the deep and diffused feeling entertained generally by Poor-Law Medical Officers on the subject of their grievances, which affords fresh stimulus for action on the part of the Committee; but to enable them to labour effectually, the sins of war—MONEY, must not be forgotten by those for whose benefit and relief such exertions are being made. As respects the expenses hitherto incurred, it is due to the Council of the National Institute to state, that owing to their kind consideration, a great item of expense for rooms has been avoided,—all along most eligible offices have been gratuitously afforded for the use of the Committee of Union Surgeons. Last year, the Council obligingly provided the spacious room for the public meeting, and they generously did so again on the 19th instant.

NOTES ON AMERICA: ITS MEDICAL SCHOOLS AND ESTABLISHMENTS.*

By EDWARD HUMPAGE, Esq., M.R.C.S., Bristol.

The clinical lectures of Professor Mott† are delivered every Saturday, from eleven until one o'clock, the cases are taken indiscriminately as they arise, and are furnished of course, from the humbler ranks; occasionally a fair lady appeared in silk and feathers, but as dress in the United States is no criterion of station, advice was given and thankfully accepted. On this occasion, (Nov. 4th.) an interesting case of hypertrophy of the left ventricle in a boy, suggested some valuable remarks on the utility of issues, in the curative effects of which, Dr. Mott places much reliance; he quoted the late Baron Larrey, whose pupil he was, and for whose surgical opinion he entertained the highest respect. It appears the Baron had great confidence in the effect of issues, and believed that they often removed the *materies morbi*, or any chronic ailments.

The next case was one of scrofulous disease of the

* Continued from page 106.

† In the previous communication there was an accidental error,—viz., *malar bone* instead of *maxillary bone*.

hip-joint, for which occasional leeching over Ponpart's ligament was advised; to be followed by counter-irritation, combining this local treatment with perfect rest, and the exhibition of hydriodate of potass with sarsaparilla. Following this was a case of psosas abscess, of which the prognosis was unfavourable, as the source of the disease appeared to be in the bodies of the lumbar vertebræ. Next came a case of talipes; and "Here, gentlemen," said the worthy professor, "we must shorten the ropes." I hoped to have seen the division of the tendons, but it was delayed for some more convenient opportunity.

A case of uterine irritation called forth some remarks on the great tendency in the present day, both in the old world and the new, to *specialities* in disease. Dr. Mott does not believe in all that is said on this subject, and thinks this view is often made the medium of quackery: hence, "We hear," said he, "of Dr. A. as the man who understands uterine affections; Dr. B. who cures the eyes; Dr. C. for the urethra; and Dr. D. for the more ignoble, but not less important, diseases of the rectum!"

There were several cases of syphilis in the form of eruptions, for which iodine and sarsaparilla were used, but most usually the chief reliance is on minute doses of bichloride of mercury. A case of caries of the ossa nasi presented itself. The patient was a woman. The skin of the nose was sound, but pus was distinguishable. She had no idea of the syphilitic origin of the disease, and this fact led the Professor to remark that we should always be careful not to say too much "on delicate subjects;" cure your patient, but do not embitter home by any suspicions as to conjugal fidelity. "I did not open this little abscess of the nose, gentlemen," said he, when the patient had left, "because she will have a sore there long enough, and I did not choose to begin it with the lancet, as blame is often attached to the surgeon for making wounds he cannot heal. Mind this, gentlemen, when you get into practice; it is worth recollecting."

A case of bronchial irritation suggested some remarks on remedies, mineral and vegetable. There is at present a great outcry in the States about the abuse of mineral remedies in chronic diseases, and a sect has arisen advocating the *sole* use of vegetable remedies,* and vapour baths. These persons call themselves Thompsonian physicians, not one half of them knowing, perhaps, whether the liver is on the right, or the left, side of the body. The profession set their faces against these persons who, nevertheless, do an enormous business, and frequently beat the regular practitioner out of the field. Dr. Mott commented very *severely* and *justly* on the want of legal redress in these matters, in the State of New York, for at present no law requires any professional education for the practice of medicine or surgery, in that part of the United States, and many men doing a practice of 5000 dollars a year, (about £1000,) had commenced their career as mere retailers of drugs, or as veterinary surgeons. This

state of things leads to all kinds of quackery, and greatly lowers the character of medical men, or, as they are always called—"Doctors." The public there have not half the respect for the profession which is seen here, nor have the honest respectable men in the profession there that influence with the public which they deserve, and ought to exercise.

As a remedy for the cough of chronic bronchitis, Dr. Mott says there is no place in the world equal to the Island of Malta, where there is always an equable and moderate temperature, very favourable to mucous exhalation. Dr. Mott says he cures pertussis easily with the following combination:—

R. Olei Essent. Amygdal. Amar., m. viij.; Extr. Belladonnæ, gr. vj.; Tinct. Camphoræ Comp., oz. iss.; Misturæ Acaciæ, oz. iiss. M. Capiat cochl. parv. j. vel. ij. ter die.

(To be continued.)

NOTES FROM A PRACTITIONER'S DAY BOOK.*

DISLOCATION OF THE HUMERUS.

What was the nature of the lesion in the following case? Was it a partial dislocation of the head of the humerus upon the edge of the glenoid fossa? I had gone on a visit to some friends who had taken country lodgings at a farm-house; a thunder storm came on suddenly, and was followed by a heavy rain, which, threatening to be of some hours' duration, I agreed to remain supper, and to occupy a bed in the house. In the kitchen there was pointed out to me a boy, who sat with his arm in a sling, and his coat thrown loosely over his back. A week previous he had received a blow on the shoulder from a fall, and had been unable to use the arm ever since. This lad was the patient of another medical man, and I felt no inclination to interfere; he had been told there was nothing out nor broken, and had been directed to rub the part with a stimulating liniment. After some trouble my friends teased me into examining the boy. I could notice no difference in the form of the two shoulders; but the boy complained of pain whenever I attempted to move the arm, and especially when I drew the elbow from the side. Making extension on the humerus downwards, and placing my hand in the axilla, I pressed the head of the bone outwards; while, executing this movement, I fancied that I felt something slip in the joint, but if it was so, the movement was so trifling, that I cannot speak with any degree of certainty. After some further examination, I thought I could detect nothing wrong, and only felt too happy to confirm the opinion which had been previously given, and to recommend a continuance of the same treatment, as it was the best under the circumstances. The next morning, on my way out of the house, I encountered the lad, and merely by way of saying something civil, I asked him how his shoulder was. To my horror, (for I thought of the breach in professional etiquette,) he waved his arm over his head, and said I had quite cured him.

* The chief of these are the Lobelia inflata, capsicum, and several bitter and aromatic plants.

* Continued from page 712 of last volume.

INFLAMMATION OF THE CRANIAL BONES.

A gentleman was thrown from his gig, and received a compound fracture of the os frontis, requiring the removal of several small spiculæ of bone. A long time elapsed before the wound healed, and even, when at length, it did so, he remained liable to renewed attacks of inflammation and exfoliation. I first became acquainted with him soon after he had undergone one of these accidents. A sinus on the middle of the forehead led obliquely down to a portion of exposed bone, which might be grasped with a pair of forceps, but was not loose enough to be removed. I directed him frequently to introduce a piece of lint, soaked in nitric acid lotion, and to allow it to remain in contact with the bone. After several months' continuance of this treatment, the bone could no longer be felt, and the sinus now readily healed.

Since the time of the accident, he had always been subject to chronic pains about the forehead, sometimes very severe, and sometimes trifling; but these had been greatly relieved by the iodide of potassium which I had prescribed. During my absence, however, he once fell into the hands of another practitioner, who, imagining the case to be one of anæmic headache, ordered the tinctura ferri muriatis, together with the use of the cold shower bath. The immediate consequence of wetting the hair was a renewed attack of inflammation in the cranial bones; my patient was himself confident that this was the exciting cause, as he now remembered that a previous attack had been brought on in the same manner. But little was done at first, though for many days he was suffering very severely from pain over the left brow; this partook somewhat of a neuralgic character, from the circumstance of the first branch of the fifth nerve being compressed, as I supposed, in the supra-orbital notch by thickened periosteum. The left side of the frontal bone was very sensitive to the least pressure, and the parts over it exhibited a slight degree of puffy swelling; the constitutional disturbance was not greater than might be accounted for by the intense sufferings, which allowed him to get but little sleep. He soon found it necessary to confine himself to his bed, for the least mental or bodily exertion, or exposure of the eyes to a bright light, increased his agony in an intolerable degree. Being now consulted, I ordered a large blister to be applied over the forehead, and the sore produced was kept open for more than a fortnight, with alternating dressings of a vesicating, and of the mercurial, ointment. At the same time, I administered internally the iodide of mercury,—half a grain at first, being gradually increased to a grain and a half every four hours. Many days elapsed before any improvement was apparent, and he always require a large dose of opium at night before he could obtain any rest. When the amendment commenced, it was very gradually, though steadily progressive, and as long a period as five weeks elapsed before he was able to leave his chamber. Before he did so, however, I substituted for the iodide of mercury, the iodide of potassium, giving it in two-grain doses thrice daily in solution. No exfoliation occurred on this occasion, and very little thickening of the periosteum remained; whilst he continued pretty free from pain for some time afterwards, suffering only occasionally, and in a very slight degree.

Although I prescribed the iodide of mercury in this instance, I do not feel disposed to do so on any future occasion. The remedy was attended with considerable inconvenience, frequently causing severe griping pains, and always requiring full doses of opium to prevent its acting on the bowels. Had I a similar case to treat, with my present experience, I should endeavour to act gently on the gums with calomel and opium, and, at the same time, administer the iodide of potassium in solution.

THE DIAGNOSTIC VALUE OF PAIN.

Pain is a very uncertain indication of the seat of disease. I remember reading somewhere of a gentleman who suffered from a very severe pain in the hip, and was immediately relieved by the excision of a part of the great toe nail, which had become inverted, and had produced ulceration. Sir Benjamin Brodie relates the instance of a gentleman who was awakened during the night by a sharp pain in the heel, which forced him to get up and walk about the room in agony. Whilst doing so, the condition of his stomach was indicated by an extremely acid eructation, and he took a dose of carbonated soda; this gave almost instant relief. The pain in the heel, in conjunction with an aced state of the stomach, requiring an alkali for its cure, afterwards occurred frequently enough to convince him of their relation. I was in the habit of introducing the catheter into a little girl's Eustachian tube, and when it rested upon the cartilage, I asked her where she felt it; she invariably pointed to a spot below the clavicle. I attended a man with severe rheumatic pericarditis, in whom the most severe pain evidently connected with the state of the heart, was referred to the left iliac fossa, and yet I had no reason to believe that there was any disease in this situation. The pain caused by the passage of a gall-stone is complained of in the epigastrium, not towards the right side; whilst that, which under certain circumstances is experienced during the passage of an evacuation through the ileo-cæcal valve, is situated in the median line, not in the right iliac fossa. I was once suffering from a small ulcer under the thumb-nail, which followed a dissection wound. In addition to the severe lancinating pain which I experienced in this situation, there was another, equally acute, upon the metacarpo-phalangeal joint of the index finger, where there was really nothing the matter. Every practitioner is acquainted with instances in which a pain, dependent upon a disordered liver, is experienced about the right shoulder, and another, connected with a diseased heart, which is referred to the insertion of the left pectoralis muscle.

COLIN ARNECAPUE.

(To be continued.)

POOR-LAW MEDICAL RELIEF AND MEDICAL REFORM.

TO THE POOR-LAW SURGEONS OF ENGLAND AND WALES.

Gentlemen,—I beg permission to address a few words, and to observe to you, that many of the circumstances stated at the meeting of Poor-Law Surgeons on Monday last, gave me great concern; not only that they did occur, but that under the present state of medical affairs

there was a presumed necessity for submitting to them until Parliament, and the Government would cause them to be corrected.

Expressing my own individual feelings and sentiments merely, I would never submit to the humiliations and indignities which in many cases are inflicted on medical men in relation to pauper practice, but would be content with a private practice, however small, if it would afford me and my family a maintenance in decent comfort; and if it was insufficient for that purpose, I would flee away, and take refuge in some Australasian region, where, taking spade in hand, or applying it to the plough, I would raise wherewith to subsist in the enjoyment of tranquillity of mind, and health of body, in an independence, rude though it might be.

In my humble opinion, however, there is no necessity for such an alternative, if the Poor-Law Surgeons would take a wide and comprehensive, instead of a narrow, view of their position; for I feel thoroughly assured that the Poor-Law Medical Officers are not sufficiently aware of the fact, that the real and ultimate cause, the fountain-head of all their grievances, is the disorganized state of the public affairs of the medical profession itself, which is almost a chaos, becoming daily worse and worse, if possible, from the creeping and crawling, and intruding of ignorant, incompetent, and unauthorized men into medical practice.

The attention of the Poor-Law Surgeons is too exclusively absorbed in the contemplation of those grievances which more immediately beset them; and they do not, in my humble opinion, look beyond them to the original cause. At the same time, therefore, that they ask to be relieved of the evils which more especially oppress them, they should seek Medical Reform, *as a whole*, and should earnestly pray for it in the spirit, at least, of the resolution which was proposed, and was not submitted to the meeting on Monday, but is subjoined to this communication.

If the parties most immediately concerned should fear that the especial cause of the Poor-Law Surgeons would be damaged or at least endangered by praying for the reform of the whole profession, I would say, that our great fault all along has been the manifestation of a low and cowardly spirit. Why otherwise occur many of those things of which we heard at the meeting, and which, with the pleadings *ad misericordiam* disgrace us amongst ourselves, and lower us in the estimation of the public and of Parliament?

At the same time, therefore, that we seek redress for the grievances of which we so loudly complain, let us exert ourselves by all the means in our power to obtain the reform of the whole profession by some legislative measure, grounded on the evidence taken before the Parliamentary Committee of the last Session, as the only effectual cure for the social as well as professional evils which afflict all branches of the profession, the Poor-Law Surgeons more especially.

I have the honour to remain, Gentlemen,

Your very faithful servant,

THOMAS MARTIN.

Reigate, February 24, 1849.

Resolution suggested by James Wyld, Esq., M.P.

"That this meeting, while especially advocating the claims of the Poor-Law Medical Officers to relief as far as practicable from the numerous and oppressive grievances which peculiarly afflict themselves, is fully aware of the fact, that manifold, dangerous and daily-increasing evils are entailed upon the community by the anomalous

state of the laws affecting the medical profession generally.

"That the evidence taken before the Parliamentary Committee bears ample testimony to the correctness of the above declaration, all the witnesses coinciding in the opinion that a revision of these laws is absolutely necessary, as much for the advantage of the public interests as for the peace and tranquillity of the medical profession.

"That this meeting therefore expresses an anxious desire that the Government will cause a Bill for the amendment of the laws affecting the medical profession, and for regulating medical practice in the United Kingdom, to be laid before Parliament with as little delay as possible, and that it be based upon the evidence taken before the Parliamentary Committee.

"And this meeting ventures still further to express a hope, that the Government and the Legislature, in consideration of the important interests involved in the matter, may be induced to legislate forthwith upon the subject, so that an effective law may be enacted during the present Session of Parliament."

CHLORIDE OF OLEFIANT GAS AS AN ANÆSTHETIC.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

A few days after the publication of the last number of the *Provincial Medical and Surgical Journal*, Dr. Snow did me the favour of forwarding to me a pamphlet "On Narcotism by the Inhalation of Vapours;" and from Dr. Simpson I yesterday received a communication on the subject of my note to you, published in the *Journal*, by which I learn that what I had supposed to be new æsthetics had been already spoken of. Dr. Snow relates experiments he has performed on three mice, with the Dutch oil, and Dr. Simpson informed me that he has made experiments with both the substances which I mentioned, and that in the *Monthly Journal*, published eight or ten months ago, he described the anæsthetic powers of Dutch liquid. Had I been in the least aware that such had been done, of course I should not have announced these agents as new; but the facts having appeared in two journals which I never see, accounts for my ignorance of what had been done. As there is no date beyond that of 1848 to Dr. Snow's pamphlet, I am not aware of the precise date of his experiments, which originally appeared in the *Medical Gazette*, but as he alludes to those of Dr. Simpson, it must have been some time after his.

I may mention that with coal gas my experiments were made in last July; with the Dutch liquid it was not until near the close of the year, though it was one of the substances I had long before put down for trial, but having several others at hand, and there being some difficulty in procuring the fluid, it was postponed until others had been disposed of. So far as I am individually concerned, it was to me the discovery of new agents, but these gentlemen having publicly named them, have a full claim to public priority, which I most cheerfully concede.

Dr. Simpson's paper I have not seen, not having been able yet to obtain the Journal in which it appeared. I therefore take my knowledge of his trials with Dutch oil from what Dr. Snow says, in his quotation, which is, "that its vapour, when inhaled, causes so great irritation of the throat, that few persons can persevere in inhaling it long enough to produce anæsthesia, but that he had seen it persevered with until this state was induced." While out of the three mice upon which Dr. Snow experimented, two died, and the third was *not* made insensible, as he supposes from the irritating nature of the vapour, an account from these gentlemen of so discouraging a character, as would certainly deter any one from using the fluid in practice. Indeed, had I seen these reports of its effects, in the hands of two gentlemen of such great experience in the action of anæsthetic agents, I should have considered them so dangerous as not to justify or render necessary any further experiments with it.

But such has certainly not been the case in my hands. I find it to be the least irritating of any anæsthetic agent which I have tried, and further investigation justifies me in repeating all I said in my notice of it. I have tried it upon many dogs and rats, young and old, in large and small doses; in no one instance have I seen any irritation caused by it, nor any repugnance to its inhalation. The animal quickly and pleasantly passes into a profound state of insensibility, and remains so. As I stated, a more death-like condition is recovered from than after chloroform, and in every instance the animals have quickly rallied and remained well, except in one where I intentionally destroyed it to observe the *post-mortem* appearances. Having ascertained the effects upon animals, I inhaled it myself, and found the action not only not disagreeable, but perfectly agreeable in every respect. My assistant, Mr. Beaumont, has taken it once, and my pupil, Mr. Morham, has taken it twice, on two successive evenings; both were rendered as insensible as is either necessary or safe for the performance of any operation whatever, or by whatever agent induced. In neither was there the least irritation; in fact both begged for more before becoming insensible; and when rallying from this condition, and both were immediately well. The latter of the two, who has three times inhaled chloroform, declares the effect of the Dutch oil, both at the time of inhaling and subsequently, to be far more pleasant than that of chloroform. I last night gave the Dutch oil to four gentlemen: in all it answered admirably, all had previously taken chloroform, and they were unanimous in declaring the oil to be more effectual, pleasant, and speedy, with less uncomfortable feelings afterwards. I repeat, then, it is an agent likely to be usefully employed, and I can only account for the unpleasant consequences in the experiments of Dr. Simpson and Dr. Snow, by the supposition that the preparations they used were impure, which I imagine Dr. Simpson now would agree to, inasmuch as in the letter with which he has favoured me he says, after this notice he obtained "some more pure, and got effects exactly like chloroform." There are other substances which I have tried the effects of, and found to possess anæsthetic power, one indeed far more

powerful than any I have yet seen named, but lest I should again find myself anticipated, I abstain from naming them until the paper in which the experiments are related, appears in the "Transactions" of the Association.

I am, Sir,

Yours faithfully,

THOMAS NUNNELEY.

Leeds, March 2, 1849.

P.S. Dr. Simpson informs me, in objecting to Dutch oil, "that it is too expensive, (far more so than chloroform,) and it is very difficult to purify." I am not a practical chemist sufficient to determine this question, but the constitution of the fluid, and the formula for its preparation, would not lead me to form such an opinion. Neither carburetted hydrogen nor chlorine are at all expensive gases, and the process for combining them is not a complex one. That which I obtained at two different times appears to have been pure, the price charged was very much less than I was charged for chloroform when it was first introduced, at least 30 per cent. less, and if the price of chloroform has fallen considerably now that it is an article regularly made, there is no reason to suppose that of Dutch oil would not do so in the same proportion. This Mr. Bullock has promised to calculate, and inform me of.

NEW ANÆSTHETICS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Having observed in your valuable Journal of the 21st instant, a letter written by Mr. Nunneley, of Leeds, from which it may be inferred, that he is the discoverer of a new anæsthetic agent, in the use of the hydrochlorate of the chloride of acetylene, as possessing all the good qualities of chloroform, and being in a great measure devoid of those of a contrary nature, I deem it a matter of justice to myself, to state that, in December last, I instituted a series of experiments on several of the organic compounds, and among these on the above-mentioned agent. I then found it to possess most of the good properties which Mr. Nunneley has assigned to it, being sweet in taste and pleasant in flavour, and of which but a small portion is required to produce its soporific influence. It may also be kept up for a considerable time with impunity, and the recovery of the patient be tranquil, safe, and speedy. The favourable specific gravity and harmlessness of its action, together with other pre-eminent peculiarities, led me to predict that it would become ere long one of our safest and best anæsthetic agents.

It would be superfluous in me now to endeavour to claim originality in the discovery, but I may affirm that I had not the slightest knowledge that Mr. Nunneley was pursuing any inquiries on the subject when I turned my attention to it at the end of last year, nor when I mentioned it to Dr. Hobson, of Leeds, on the evening of Wednesday, the 7th of February, which was previously to the publication of

Mr. Nunneley's announcement. I then pointed out to Dr. Hobson, the predominating properties which Mr. Nunneley has ascribed to this agent, as the accompanying letter proves.

I need not to enter into an elaborate detail of its composition or characters, as Mr. Nunneley has with his usual talent and ability there depicted. As respects myself, however, I beg to hand you the letter from Dr. Hobson, in confirmation of what I have advanced. This I shall be obliged by your inserting along with mine in your next Journal; and I may add, that if Mr. Nunneley's publication had not made its appearance at the time it did, I should have called your attention to the point in question in a few days, with an elaborate detail.

I remain, Sir,

Yours obliged and respectfully,
RICHARD OASTLER JOHNSTONE.

Willow Cottage, Bramley,

Feb. 28, 1849.

[It is scarcely necessary for us to observe, that Dr. Hobson's letter fully confirms Mr. Johnston's statement.—Ed.]

Medical Intelligence.

LIGHT COAL-NAPHTHA AS AN ANÆSTHETIC.

We are informed by Professor Simpson that he has of late been using "Light Coal-Naphtla" as an anæsthetic, and finds it perfectly successful. It has one, but only one, advantage over chloroform—its cheapness—costing only one penny per ounce; but its savour is not by any means so agreeable.

IMPORTANT MEDICAL DECISION IN THE SMALL DEBTS' COURT.

THE MASTER AND WARDENS OF THE APOTHECARIES' COMPANY v. LOBO.

The action was instituted, we believe, at the instance of the Medical Protection Society, but the actual plaintiffs in the case were the *Master and Wardens of the Apothecaries' Company*, for the reason, that the statue under which the action was brought recognizes no other proper plaintiff. The effect of the decision is to bring the case of the penalties of unlicensed practitioners, among whom *all unlicensed practitioners, including chemists, who compound drugs upon prescriptions, whether their own or the prescriptions of authorized practitioners*, are included, within the jurisdiction of the Small Debts' Courts, thus rendering recoverable, at the risk of two or three pounds, penalties, all former attempts to recover which involved an expense of more than £350 upon each action. The law, therefore, which has hitherto been a dead letter, on account of the enormous expense necessary to put it in motion, will now, we have little doubt, be rigidly and universally enforced.—From the *Standard*.

APPOINTMENT.

R. Lloyd Williams, M.D., F.R.C.S., has been appointed visiting Physician to the North Wales Hospital for the Insane.

ROYAL COLLEGE OF PHYSICIANS

HARVEIAN ORATION.

Dr. Badeley, of Chelmsford, is appointed to deliver the *Harveian Oration* before the Royal College of Physicians, on the 25th of June next.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, Feb. 23 :—H. Chawner; J. Nash; S. J. A. Palmer; G. F. Ree; T. Mather; J. W. W. James; E. G. Goulden; C. J. Bennetts; F. H. Orvis; G. Betts.

Friday, March 2 :—P. Allen; G. F. Gwyn; J. G. Gibbs; J. Smith; W. H. Johnson; W. R. Hayne; W. Cooke.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates Thursday, February 15th :—William Bratt, Stratford-on-Avon; John Hall Bywater, Knottingley.

Thursday, March 1st :—James Williams, Holywell; Richard Wilson, Poulton le Fylde; Thomas Henry Newsam, Leeds.

OBITUARY.

Died, in September last, at Malta, where he was residing for the benefit of his health, James Carson, Esq., M.B., Senior Physician to the Northern Hospital, Liverpool.

January 29th, Wm. Peck, Esq., Surgeon, Kimbolton, Huntingdonshire.

BOOKS RECEIVED.

The Brain the Sole Centre of the Human Nervous System. By Edwin Lee, &c. (Read before the Royal Society, May, 1848.) Edinburgh. 1848. 8vo. pp. 14.

On the Dependence of Animal Motion on the Law of Gravity. By Henry Wigglesworth, M.B., Scholar in Physiology of the University of London. Part I. London: Baillien. 1849. 8vo. pp. 156.

Two Lectures on Cholera and Intermittent Fever. By Charles W. Bell, M.D., K.L.S., Physician to the Manchester Royal Infirmary, late Physician to H.M. Embassy in Persia, &c. &c. London: Churchill. 1849. pp. 101.

Synopsis of Percussion, Auscultation, and other Methods of Physical Diagnosis. By Ray Charles Golding, M.D. London: Renshaw. 1849.

Thoughts on Pulmonary Consumption; with an Appendix on the Climate of Torquay. By William Herries Madden, M.D., Physician to the Torbay Infirmary and Dispensary, &c. London: Churchill. 1849. pp. 219.

On Perforating Ulcer of the Stomach. By Edward Young, M.D., &c. London: Simpkin, Marshall and Co. 1849. 8vo. pp. 15.

Eruptions of the Face, Head, and Hands, &c. Illustrated with Coloured Plates. By T. H. Burgess, M.D., &c. London: Renshaw. 1849. 8vo. pp. 254.

TO CORRESPONDENTS.

Communications have been received from Dr. Copeman; Mr. Martin; Dr. S. Edwards; Mr. Humphry; the Birmingham Pathological Society; Mr. T. B. Smithies; Dr. Oke, a Member; Mr. Humpage; Dr. Ballard; Dr. Heaton; Mr. R. O. Johnstone; Mr. Bottomley; Mr. T. W. Crosse.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON SURGERY,

DELIVERED IN THE

MEDICAL SCHOOL OF CAMBRIDGE.

By GEORGE MURRAY HUMPHRY, Esq., Downing College, Surgeon to Addenbrooke's Hospital.

LECTURE V.

EFFUSIONS OF SERUM AND LYMPH.

Effects of Inflammation; the Order in which they occur varies according to the Vitality and Peculiarity of the Tissue affected, and the Peculiarity of the Inflammation: Effused Serum generally disappears with the Inflammation; occasionally is persistent; sometimes is the only Symptom, as in Hydrocele, Hydrothorax, Hydrops Articulii; Treatment: Effusion of Lymph, its Organization; rarely becomes organized on the Surface of Skin or Mucous Membrane; the Structure into which it is converted; shows Signs of imperfect Assimilation of Fibrin by its Contraction, which, as well as the Disposition to contract when stretched, ceases after a Time; Strictures; Cicatrices; Contractions of Joints; the Force of Contraction proportionate to the Force of Organization of the Fibrin, from which the new Structure is formed; false Membranes liable to same Diseases as other Parts,—to calcareous Degeneration; undergo various other Changes, according to the Movements and assimilative Influences of surrounding Parts—in Bursæ, Joints, serous Cavities; Melon-seed-like bodies; loose Cartilages. Insidious Lymph-formations; Treatment by Mercury, Stimulants, Pressure, Bougies; their Mode of Action; Excision.

The injurious effects of inflammation upon the organ in which it is seated consist, first, in the effusion of new products, serum, lymph, and pus, into the interstices of its substance; and, secondly, in the alteration and destruction of its texture by atrophy, softening, interstitial absorption, ulceration, and mortification. In the ordinary course of things these changes take place nearly in the order above enumerated, the effusion of serum being the attendant on the mildest, and mortification the result of the severest, forms of the disease. This order is, however, liable to be interrupted by numerous causes, such as variations in the strength of the patient, and the vital energy of the part affected. I have before mentioned that in old and feeble persons a slight amount of inflammation is quickly followed by ulceration and mortification. The vitality of the textures is with difficulty maintained in such persons

under ordinary circumstances, and gives way altogether under the disturbing agency of inflammation. Compare the inflammation of the healthy and robust man with that in the lower extremities of the old person, where the nutritive and reparative forces are failing, and the circulation is impaired by the diseased condition of the great arterial trunks. In the former the inflammation, acute and painful in its progress, is attended by the formation of lymph and pus, ulceration occurs only to a sufficient extent to open the abscess, the contents of which are well elaborated and quickly discharged, granulations follow, and cicatrization takes place without much loss of time; whereas, in the extremities of the aged and infirm, the inflammation, consequent probably on some slight provocation, such as a little scratch or bruise, does not amount to any great severity, and the disease presents few of the ordinary characters of an acute affection; but it is disastrous in its effects, for the textures quickly give way under it, ulcers soon occur, spreading, and difficult to heal, and mortification commences. The destructive progress of the disease depends, too, not merely on the disposition of parts to fall a prey to ulceration and mortification where the inflammation was first excited, but in the facility with which the inflammation spreads among the adjacent structures; they offer but little resistance to its progress, so that it runs from point to point, carrying desolation with it, and terminating, for the most part, only with the destruction of the limb or life of the patient. So fatal in its results may be the slightest disturbing cause where the processes of nutrition are thus feebly conducted.

Corresponding results occur also generally in the textures and parts of the body to which the supply of vessels is most scanty, and in which the vital energies are least active, such as bone, tendinous and fibrous textures, in all of which inflammation is frequently followed by mortification. In the lower extremities inflammation is more destructive than in the upper, and in both than in parts nearer to the centre of the circulation. There appears, however, to be some peculiarity in certain textures which predisposes them to one or other of the effects of inflammation; thus mucous membranes and the skin are very prone to ulceration, and serous membranes to the formation of lymph, although the former are more vascular than the latter.

Much depends, also, upon the peculiar character of the inflammation itself. In chilblain the congestive stage is of long duration, and, if the inflammation

proceed beyond it, the next effect is commonly ulceration. Erysipelas sometimes produces mere scaling of the cuticle or effusion of serum beneath it, in the form of vesicles, or into the subcutaneous cellular tissue, causing œdema. In other cases it passes on quickly to suppuration and mortification, not only of the skin, but more particularly of the cellular tissue. In one form of specific disease—gonorrhœa, the inflammation often lingers for months, and produces only suppuration from the surface of the membrane; in another—syphilis, the ulcer is generally the earliest symptom. In boil, carbuncle, and the plague, the inflammation hurries over the early stages, and runs on quickly to the mortification of the parts affected. The varying effects of peculiar kinds of inflammation are illustrated also in small-pox, measles, scarlatina, and croup.

Under ordinary circumstances the earliest and least injurious effect of inflammation consists in the effusion of a preternatural quantity of serum into the interstices or upon the surface of the inflamed part; this takes place with facility proportionate to the looseness of structure of the organ affected, and the delicacy of the patient. A very slight inflammation of the face will cause such swelling, by effusion of serum into the loose tissue under the eyelids, as completely to alter the features; and you have, doubtless, observed the rapidity with which œdema follows inflammation occurring in feeble, delicate, emaciated persons.

When the inflammation subsides, this serum is commonly removed as readily and quickly as it had been effused; or a slight degree of pressure, or a gentle stimulus, will suffice to effect its resorption. Occasionally, however, it remains for a considerable time after the other evidences of inflammation have passed away, and its continuance indicates a weakened state of the part, or a debilitated condition of the patient. An œdematous fulness of the eyelids often remains for a long time after an attack of erysipelas of the face, and ceases only when the patient has recovered his health and strength. There are at the present time two instances of this œdema of the face after erysipelas among the out-patients; one in a delicate young woman, the other in a man much enfeebled by the attack of erysipelas, which occurred some months ago.

In some cases the persistence of œdema in the subcutaneous cellular tissue is the result of continued deep-seated inflammation in the limb. Perhaps there is an abscess beneath the fascia which time will more clearly reveal; there may be ulceration of the cartilages of a joint, or some disease of the bone. I remember a remarkable instance of this kind in a man who suffered under œdema of the upper extremity, chiefly about the elbow; for some time it constituted the only symptom, and could not be traced to any disease of vein or obstruction to the circulation. Other symptoms supervened requiring amputation of the limb; and we found that inflammation and necrosis of the medullary texture of the humerus had been the cause of the continued swelling of the arm.

This earliest and slightest effect of inflammation requires our further attention, inasmuch as it sometimes

exists alone, and constitutes the entire disease. This occurs more particularly in the serous cavities. Hydrocele is a good and familiar example of it. The swelling of hydrocele commonly takes place slowly and imperceptibly, is not attended with pain or other decided evidences of inflammation, and is inconvenient only from its bulk. We can at first scarcely believe that this slight painless affection,—this simplest of diseases, is the result of that same morbid process which gives rise to the formation of an acute abscess, and which sometimes brings speedy destruction to limb and life. Nevertheless a little reflection will convince us that these different effects are connected together by sufficient intermediate links to chain them to one common cause; and we shall find little difficulty in admitting the serum of hydrocele to be as much the product of inflammation as the pus of an acute abscess. In the first place hydrocele frequently occurs as the remnant of an acute inflammatory attack, during which the tunica vaginalis was distended with fluid, as in the common hernia humoralis, or epididymitis, where the swelling chiefly consists of serum effused into the cavity of the tunica vaginalis; the inflammation subsides, its other effects pass away, but the serum may remain, and form a hydrocele. Secondly, an examination of the interior of the sac, in most cases of hydrocele, furnishes additional evidences of the existence of inflammation, such as adhesions and thickening of the membrane from deposit of lymph, induration of the testicle, or epididymis, and so forth. The disease is not generally to be cured by the ordinary means employed to effect the removal of serum; counter-irritants and pressure usually fail. If the fluid be evacuated, it soon collects again, and we are obliged to resort to various means of exciting a more acute inflammation to cure that slight disease upon which the effusion depends. We inject an irritating fluid into the distended tunica vaginalis upon the same principle that we apply a blister to remove a chronic cutaneous affection. We excite a new inflammation, which cures the old one, and terminates by resolution; for you must know that it is not essential to obliterate the hydrocele cavity; the mere change produced by a certain amount of inflammation of its lining membrane is sufficient to cure the disease.

Effusion of serum sometimes takes place in the same insidious manner into the cavity of the pleura, and attracts attention by its pressure upon the lungs, the first symptom of its presence being not pain, but dyspnoea. The same affection of synovial cavities constitutes hydrops articuli, and these effusions into serous and synovial cavities are generally difficult of cure, in proportion to the slowness of the inflammation which induced them. So resistant are some of these cases to the modes of treatment usually adopted for the removal of serum, such as blisters, pressure, mercurial inunction, &c., that the same energetic proceeding which we employ for the treatment of hydrocele has been adopted in them, and the injection of a solution of iodine into the cavity of a joint, by exciting acute inflammation, is reported to have been occasionally successful in curing the chronic disorder. I do not recommend you to try this

summary proceeding, because I do not think the disease is sufficiently severe to warrant so dangerous and uncertain a remedy. Even in the tunica vaginalis, we cannot always regulate or control the inflammation excited by our injections; sometimes it is insufficient to effect a cure, at others it exceeds our wishes, and extends in a severe form to the epididymis or testicle. Much more should we apprehend danger to the joint, if not to the life of the patient, from the application of an irritating fluid to so susceptible a texture as the synovial membrane. We have sufficient experience of the destructive effects of acute synovitis to make us unwilling to adopt so decided a method of inducing it as the injection of an irritating fluid into the cavity of a joint.

Œdema from effusion of serum may result also from other causes besides inflammation, such as local or general obstruction to the circulation; general debility, when the blood is thin, and its fluid components pass with greater facility than natural through the walls of the capillary vessels, which, partaking of the general want of tone, do not sufficiently regulate the escape of their contents; and local debility, for instance, when the lower extremity has been long confined in splints, in consequence of fracture, and is at length freed from restraint, and allowed to hang down, the weakened vessels and tissues, are unable to bear the weight of the superincumbent column of blood, and œdema results, continuing sometimes for a long period, and forming a troublesome symptom for months after the injury.

In the progress of the inflammation some of the fibrin of the blood altered in the manner before described by the inflammatory process, passes with the serum through walls of the capillary vessels into the interstices of the adjacent tissues, where organization quickly commences. The fibrin or lymph, as it is often called, concretes into a more or less consistent clear jelly-like substance, in which exudation corpuscles, nearly resembling the white globules of the blood, are sometimes observed. These passing through the several stages of cell-formation, may become converted into tissue much after the same plan as that by which the embryonic structures were originally developed. At other times, and this is, perhaps, the more common mode, the fibrin becomes organized by a simpler process, similar to that which takes place in the coagulation of blood removed from the body; its particles are at once arranged into fibres, and these fibres unite into a tissue, without undergoing the more complex intermediate stage of cell-formation.

The fibrin, as well as the serum effused in inflammation, corresponds closely with that of the blood circulating through the inflamed part, having undergone very little change in its passage through the walls of the vessels. At first it is suspended in the serum, and when concentered, it presents an indistinctly fibrous or reticular structure, resembling that of the buffy coagulum formed out of the body, but more elaborate, in consequence of the more favourable situation for organization in which it is placed. A blister sometimes affords an opportunity of observing the exudation of fibrin in inflammation, and its coagulation

into a loose reticular structure, from which the serum is gradually expressed.

When the inflammatory fibrin or lymph is effused upon the surface of the body, as in the case of a blister, or upon the membranes which line the canals communicating with the surface, the process of organization never goes on to any great extent. The new product rarely obtains an organic connection with the skin, or a mucous membrane, or becomes traversed with vessels. It is soon dislodged, in consequence of the movements of the part, the formation and passage of its secretions, and other causes, and is separated from the body. Hence it is that adhesions of the opposed surfaces of canals opening upon the surface of the body are so rare, and, perhaps, never occur, without the previous destruction of the mucous membrane which lines them. The instances in which lymph is found remaining, even for a short time, upon the surface of a mucous membrane, are few. It is sometimes seen in the trachea, more particularly in croup, when the effusion takes place rapidly, and the new product is expectorated sooner or later if the child lives. The lining membrane of the uterus, after puerperal inflammation, is sometimes found to be coated with lymph, which is not much disturbed, either by the slight movements of the organ, or by the scanty secretion from its surface. In the ureters, where the secretion of the kidneys trickles slowly down, and in the bladder, where it gradually collects, and is gently evacuated, the lining membrane is sometimes found covered with tubes or flakes of lymph, though it may be a question whether they become organised even here. In this specimen the coating of lymph extends through the urethra, and in this the canal of the ureter is completely obliterated; I suppose that in this latter instance lymph had become organized and filled up the tube, but it is associated with such extensive disease of kidney, that the formation of urine on that side had probably been quite suspended for a considerable time. The small amount of secretion furnished by the mucous membrane of the bladder and ureters, which has no special glandular apparatus, is another circumstance rendering it more likely to become the seat of deposits of lymph, than the membrane lining the other excretory passages.

In the closed cavities, more particularly in those lined by serous membranes, and in the interstices of the textures, the effused lymph becomes organised, connected with the structures upon or among which it lies, and supplied with blood-vessels, which may be discovered in it after twenty-four or forty-eight hours. The mode in which these vessels are formed is not quite certain, but it is on the whole most probable that they, as well as blood contained in them, are the result of developmental processes taking place in the lymph, similar to those by which the vessels are first formed in embryonic tissues, and that they obtain a connection with the vessels of surrounding parts by the same mysterious power as that which enables them to unite together and form a plexus in the new medium. This is, I think, a more probable view of the mode of formation of vessels in new structures, than that which attributes them to the elongation and projection into the new

tissues of the adjacent capillary tubes. For the further exposition of this subject, however, I must refer you to the more particular accounts detailed in treatises on physiology.

The structure into which the lymph is ultimately converted under ordinary circumstances, is one of a simple kind, more or less resembling the common areolar or fibrous tissues; but it never attains to so great perfection of organization; it is never so soft, fine, and elastic; it is more opaque, and its component fibres are less distinct and regular in their arrangement.

It presents also another evidence of imperfect organization, and of the incomplete assimilation of the fibrin from which it is formed in its disposition to contract. This lasts for a considerable period after its formation, and gives rise to some of the most troublesome of the after effects of inflammation. It is by the gradual contraction of the lymph effused during inflammation into the substance of mucous membranes and submucous tissues lining the various ducts and canals that the greater number of strictures are produced. I say that strictures are occasioned by the contraction of lymph effused into the *substance* of mucous membranes, because, as I just explained to you, the lymph shed upon their *surfaces* very rarely remains for a sufficient length of time to acquire an organic connection with them. This property of the lymph is often not manifested till the inflammation which gave rise to the effusion has subsided, so that the active symptoms of the inflammation had generally passed away before the indications of stricture are observed.

It is rather a remarkable fact, and not very easily explained, that these strictures from effusion of lymph, or simple strictures as they are called, rarely occur except near the orifices of canals where the mucous membrane is surrounded by the striped fibres of voluntary muscles, or by these blended with unstriped fibres. I never saw, and do not remember to have read of a case of *simple* stricture of the alimentary canal in the interval between the upper end of the œsophagus and the sigmoid flexure of the colon, and suspect that it rarely occurs in the latter situation, except in connection with stricture of the lower part of the rectum. Simple strictures of the trachea and bronchi of the gall ducts, ureters, and ducts of the salivary and other glands are also exceedingly rare.

The disposition to contract continues for a certain time, and then ceases spontaneously, the new structure becoming gradually more assimilated to common areolar tissue in its properties and physical characters. So that if the contraction can by any means be prevented till that period has arrived, this evil consequence may be prevented altogether; and if the new structure be stretched after that period has elapsed in such a manner as to avoid the recurrence of inflammation, I believe I am right in saying that it will not resume its former contracted state. This specimen is a good illustration of the fact, that the narrowing of a tube from stricture goes on for a certain time only, and that the calibre of the tube at the strictured part may remain the same for a great number of years. It is the upper part of the œsophagus of a woman in whom

difficulty of deglutition had existed for 40 years. During the whole of that time she had been unable to swallow the smallest particle of solid food; even the fluids upon which she was supported were obliged to be made thin in order to pass the obstruction; on one occasion she was nearly choked by a gooseberry pip which accidentally reached the pharynx, and which was returned after causing her much suffering. Not long after the commencement of her illness she was examined by Sir Astley Cooper, who discovered a stricture of the œsophagus and gave an unfavourable opinion of the case. You see that the only trace of disease is the narrowing of the tube and a slight opacity of the lining membrane, with a few firm threads surrounding it, the shrunken remains, no doubt, of lymph effused long ago. How trifling a structural alteration in comparison with duration and importance of the symptoms occasioned by it: and how easily, in all probability, could the remedy have been applied and the stricture dilated had the precise nature of the case been understood at an earlier period.

The movements of joints are frequently impeded by the contraction of lymph effused into the substance of their capsules. This is particularly observed in the shoulder joint, and is a very frequent consequence of bruises from falls upon the shoulder; the capsule, which is very loose in order to permit the free movements of the joint, and strong to prevent its dislocation, becomes contracted in consequence of the effusion of lymph into its substance and upon its surface, and this takes place chiefly at the lower part of the joint, from the arm being kept against the side and from the capsule being thickest in that situation, so that when the active symptoms have subsided the patient is unable to raise the elbow; the deltoid wastes from disuse, and the flattening of the shoulder so produced, together with the continued inability to move the joint gives rise to the apprehension that some dislocation or fracture has occurred and been overlooked. In process of time, by use of the arm and stretching of the capsule, the movements of the joints may in a great measure be regained. These cases often fall into the hands of quacks, who proceed in a more summary manner. They declare that the bone is out of place and make forcible extension for the purpose of reducing it. By so doing they stretch the contracted capsule, and it may happen that the patient recovers the use of his arm in a short time, but I have frequently known severe inflammation of the joint excited by these rough proceedings.

The contractions of cicatrices going on for some time after ulcers have healed and wounds have united, is, in like manner, due to the continuance of this property in the imperfectly-assimilated fibrin of which they are composed. By its constant operation it becomes a very powerful force, overcoming the muscles and bending even the solid parts of the frame. It continues only for a certain time. The cicatrix ceases to diminish in size a few months after the ulcer has healed; if its contraction can by any means be prevented taking place till that time it will never occur at all, and if the cicatrix be stretched after that period without injury to its texture, I believe that it will not

return to its former state. The lad whom you have seen in the hospital much disfigured by scars after a severe burn, is said to have been unable to extend his elbows in consequence of cicatrices upon the fore-part of the arm and forearm, till one day falling down he made a forcible attempt to put out his arms for the purpose of saving himself and stretched the cicatrices; from that time he has been able to extend the elbows very well.

This contractile property of lymph is most strongly marked when its effusion is the result of active inflammation in a strong and healthy person,—that is to say, when the independent force of organization of the fibrin is greatest, and when, owing to its resistance to the assimilative influence of surrounding parts its own peculiar qualities are most fully shown. It is least perceptible in weak and cachectic persons, the fibrin of whose blood when drawn from the body sets quickly into a loose, soft, large coagulum. You have probably remarked the abundant flabby granulations and the rapid cicatrization which sometimes takes place in the ulcers of these delicate subjects, and you may have remarked too, that these cicatrices so quickly formed are thin and imperfect, contract but little, and give way again to ulceration upon very slight exciting causes.

Once organized, these false membranes,—as the deposits of lymph are sometimes called,—become constituent parts of the body, subject to the same laws of nutrition with it, and to the same deviations of those laws, or in other words to the same diseases. They may increase or diminish in size, and they may become the seat of inflammation with each of its various effects, of tubercle and of cancer. In one important respect they differ from all the natural textures, in that they do not attain to the same degree or vital force or to the same perfection of physical organization, and in consequence of this inferiority they give way before some of the common causes of disease which the other tissues are able to resist. They are the first to suffer in scurvy and other diseases of the same kind, and when attacked by inflammation they quickly fall into ulceration and mortification, and the healing processes are with difficulty and imperfectly established in them. Hence the well-known liability of cicatrices to ulcerate and the troublesome sores occasioned thereby.

Of these new productions some are the result of the reparative processes, when they take the place of a natural structure, which had been destroyed, and perform a useful office in the economy; others are extraneous or additional parts forced into existence by disease, and are altogether useless. These latter, as the common result of want of function, and in obedience to that economical law of nature, which does not suffer useless parts to be maintained at any great expense to the rest of the system, are for the most part imperfectly nourished and in course of time shrink up; or they may undergo another change which I shall again bring under your notice as an occasional consequence of atrophy—viz., calcareous degeneration, or a conversion into earthy masses, by the deposit into their substance of carbonate and phosphate of lime. Perhaps

the change may be more properly described as a transformation of the new substance into those salts. This is not ossification, for the saline particles do not appear to be arranged in any definite order, but merely to be heaped irregularly together into an amorphous mass. The calcareous masses occasionally found between the layers of adherent pleuræ are instances of this degeneration of portions of lymph which had been effused into the pleural cavity during inflammation.

Sometimes, however, it happens that the new formation instead of being subject to either of the above results of atrophy, undergoes certain other changes which bring it into a more or less close resemblance to the structures in or near which it lies. Under ordinary circumstances, lymph becomes in course of time converted into interlacing fibres which resemble those of areolar tissue, and this is more particularly the case when it is effused into that tissue or on the surface of a serous membrane. When it is placed among the tendinous structures it may assume a fibrous sinewy character, and in the neighbourhood of bones and joints it may be converted into cartilaginous or osseous substance.

The effusions into bursæ, which are the seat of chronic inflammation, and into joints, afford some curious illustrations of these changes. Here are a number of little oval bodies of about the size and shape of melon seeds, lying in the bursa beneath the annular ligament in front of the wrist; and similar bodies are not unfrequently found in that situation. They are very tough, composed of structure-like fibro-cartilage, smooth on the surface, mostly loose, but in a few instances attached by narrow pedicles to the inside of the bursa. They are probably formed of lymph effused during inflammation, and moulded into this peculiar shape by the friction to which it is continually subjected during the movements of the tendons, at the same time that it is gradually transformed into a tough fibro-cartilaginous structure in obedience to the assimilative influence of the adjacent tissues. Many, perhaps all of them, are at first attached to the lining membrane of the bursa, but they gradually become pediculated, and at last are rubbed off and float about loose in its cavity. The same explanation is probably to be given of the formation of loose cartilages in joints. There seems every reason for supposing that they originate in small masses of lymph, effused like the white patches on the pericardium during some imperceptible inflammation of the part, and that they are at first attached to the interior of the synovial membrane. They increase in size, undergo cartilaginous transformation, project into the synovial cavity, become pediculated, and at last, during the movements of the joint, are rubbed off from the surface on which they grew; then, being loose in the cavity of the joint, they are occasionally caught between the articular surfaces, and give rise to the sudden and severe pain characteristic of the disease.

These specimens illustrate some of the various forms imparted to lymph thrown out upon surfaces which are subject to attrition. On the pericardium it acquires an uneven, or more or less distinctly reticulated appearance. In these diseased and thickened bursæ it has

been transformed into tough fibrous bands and cords, crossing from one part of the lining membrane to another; and in this joint it has been converted into short fibres, set close together perpendicular to the surface, like velvet. The surfaces of serous membranes which have been for some time separated by the effusion of serum into their cavities, are sometimes sprinkled over with small, firm, glistening bodies, of about the size of millet seeds; they look like tubercles, and are sometimes described as such, but they appear to result from the coagulation of the lymph as it exudes in drops upon the interior of the membrane.

Some of these lymph formations take place without the signs of any inflammation attending them, and correspond with those insidious collections of serum of which I adduced hydrocele as an example. Of this kind, are the adhesions so often found uniting the opposed surfaces of the pleuræ in persons who are not known to have suffered any symptoms of pleurisy during life, also the white patches very commonly found in the pericardium covering the anterior surface of the heart; and nearly allied to them, appear to be those tough, dense, opaque white masses occasionally observed on the peritoneum covering the spleen and liver. These formations are interesting in a pathological point of view only, for we obtain no knowledge of their existence during the life of the patient, and they do not generally interfere with the function of the organ upon which they occur.

Fibrinous exudations may result in like manner with serous effusions from mechanical impediments to the circulation of the blood. A large loose coagulum of fibrin often forms in the serum removed by tapping from the abdomen in ascites, and the coagulation of the fibrin thus effused, together with the serum, may take place in the living body, forming the loose soft masses which are frequently found in the dropsical belly, floating about, or attached to some of the viscera.

After the enumeration of this long catalogue of evils consequent on the effusion of lymph into the cavities, and among the tissues of the body, you will feel the importance of endeavouring to arrest at an early period the inflammations of those parts in which we know by experience that it is likely to take place. I have already mentioned the beneficial influence of mercury in these cases. In iritis, for instance, the administration of mercury should be commenced as soon as the earliest symptoms of the disease are observed, and it can then be continued according to circumstances. It is one of the most effectual means of arresting such inflammations, and preventing the effusion of lymph, and it unquestionably exerts also some influence in promoting the removal of lymph already effused. The good effects of the medicine in checking the inflammation, and promoting the absorption of the lymph, are generally observable before the evidences which we are accustomed to watch for of its influence upon the system, such as a swollen state of the gums, salivation, &c., are manifested. An improvement in the condition of the eye in iritis, and a softening of the induration about a syphilitic ulcer, usually

precede the soreness of the gums and the increased flow of saliva, so that with few exceptions we may regard the first signs of mercurial influence upon the system as an evidence that the medicine is working with sufficient activity to produce its effect upon the disease. Except in a few acute cases, the advantage gained by administering mercury in such doses as to produce more than a slight soreness of the gums, is not an equivalent for the injury sustained by the constitution. In a chronic case, where the mercurial influence is required for a considerable period, a slight soreness of the gums, scarcely sufficient to attract the patient's attention, may, in most instances, be kept up with very little detriment to the health; but if, in our anxiety to hasten the cure, we go beyond this point, the increased effect of the medicine upon the disease is not proportionate to the injury done to the health, and we are often obliged to discontinue its use for a period, or altogether. I am convinced that the injurious consequences of a mercurial course may be, in a very great measure, avoided, and its good effects obtained by carefully watching the patient, so as to prevent diarrhœa, and keep the impression upon the system within the bounds which I have mentioned.

In some situations we have the opportunity of employing other more direct means, which are found to have some influence in promoting the absorption of effused lymph, such as the local application of stimulants. The application of weak solutions of sulphate of zinc, nitrate of silver, &c., facilitates the removal of a nebulous opacity of the cornea, and a blister on the skin will sometimes lead to the absorption of lymph from the indurated cellular tissue beneath. The employment of uniform moderate pressure is also alike serviceable in reducing inflammation, and in promoting the removal of solid effusions resulting from it. You will be surprised at the rapidity with which the indurated swelling of the epididymis, remaining after inflammation, may be reduced, by well-applied pressure with adhesive plaster; and the induration of the skin, and subcutaneous cellular tissue around a chronic ulcer of the leg is most quickly and effectually removed in this way.

It is not easy to form an opinion in each particular case, as to the probability of a deposit of lymph undergoing absorption, in consequence of the employment of those measures which we know to be beneficial in some instances; we are often uncertain respecting the advantage to be expected from the administration of mercury, when a recent attack of inflammation has left the pupil irregular, and the iris adherent, or from the application of stimulants, when an opacity of the cornea has existed for a month or two. I suppose that after the lymph has become fairly organized and supplied with vessels, so as to become a constituent part of the body, no impression is likely to be made upon it by stimulants or mercury, unless they be employed with severity, which would act injuriously upon the other tissues. The operation of pressure no doubt extends over a longer range of time, for if the natural tissues are not proof against its destructive effects, when they are subjected to it for a considerable

period, as in the case of an aneurism, which makes its way to the surface in consequence of the absorption of the surrounding parts occasioned by its pressure, much less can these new and morbid products resist its influence.

With reference to the last remark, it may be well to mention that the effects of each of the above modes of treatment in promoting the absorption of lymph formations, depends upon the low vitality of the new products, and their inability to withstand certain disturbing influences, which fail to effect the original or natural tissues. The mercury, the stimulants, and the pressure, are in each case necessarily applied to the new and old structures alike; the solution of sulphate of zinc produces its immediate effect upon the other parts of the eye, as well as upon the opacity of the cornea, and the bandage compresses the healthy no less than the morbid components of the limb, but the new formation yields and undergoes absorption under conditions which the healthy or natural parts are able to bear. For the same reason the influence of mercury, taken by the mouth, is generally manifest upon the disease before its peculiar effects upon the system are observed.

When lymph is effused into the substance, or upon the surface of an internal organ, we have no means at our command whereby we can in any way prevent or remove the injurious effects of its disposition to contract; but when it is situated within reach of mechanical appliances, we can sometimes interfere to prevent the contraction, or to stretch the new product after its contraction has taken place. A cicatrix at the bend of the elbow may be kept extended till it has lost the disposition to contract, and I have related to you an instance in which there is every reason to suppose that the cicatrix was stretched, after it had ceased to contract. It rarely happens, however, that we are able by mechanical means to obviate this disposition of cicatrices, which, though on the whole a happy provision, is occasionally productive of very disastrous results.

It is in the treatment of strictures, caused by contraction of lymph effused into the substance of mucous membranes and the submucous tissues, that our mechanical appliances are attended with the greatest benefit, and they operate, for the most part, in a curative rather than a preventive, manner. The usual treatment of stricture consists in the dilatation of the narrowed channel by means of bougies, which have the effect of stretching the contracted false membrane causing the stricture, at the same time that by the pressure they exert, they promote its absorption, and by the slight stimulus they impart, facilitate that absorption. The passage of the instrument is repeated from time to time, a larger size being introduced as often as admissible, till the new product has been absorbed or stretched to a sufficient extent, and has lost the disposition to contract again. In order to ensure the permanence of the cure, it is well occasionally to introduce as large an instrument as the canal will admit, for a considerable time after the full dilatation of the stricture.

The treatment of strictures consists, therefore, in

exerting slight pressure and gradual extension for a lengthened period, and you can easily understand how injurious rough and unskilful management of the disease is likely to prove. If too great force be employed, the lining membrane of the canal may be lacerated or inflammation induced, leading to cicatrization or the further effusion of lymph, and the consequent more complete narrowing of the tube. The patient pains-taking gentle surgeon is in the long run most successful in the treatment of these cases. If the instrument selected, which on first trial should be of such size as nearly to fill the canal, does not pass readily, try a smaller one, endeavour to press it on gradually and gently, expending time rather than force upon it. If it passes, allow it to remain for a quarter of an hour, more or less, and repeat the operation in a few days with the same instrument or with one of a size larger. If you do not succeed by gentle pressure continued for a few minutes in dilating the stricture so as to allow the instrument to pass, it is well to allow the patient to keep the instrument pressed against the stricture for an hour or so, and after this proceeding has been repeated a few times, the difficulty is generally overcome and the instrument passes on. I find the plan of pressing upon the stricture with a moderate sized bougie to answer better on the whole, than the attempts to pass it with small instruments, which are likely to injure the membrane and become entangled in its folds. Patience, perseverance and gentleness, are the great requisites to ensure success, and you will find few strictures which do not yield to them. In a few instances, where the stricture is of long continuance, and has been reduced to a mere thread-like constriction of the tube, its laceration by the forcible introduction of an instrument may be followed by permanent cure, but these cases are not common, and we cannot very well be apprized of the existence of such a condition.

The division of strictures by the knife is less likely to be attended with permanent benefit than their dilatation with bougies, because the wound soon heals and the contracted condition of the tube returns as bad as before.

Excision presents the only means with which I am acquainted for getting rid of the melon seed-like bodies in bursæ, and of loose cartilages in joints; the latter may sometimes be kept fixed by bandage in one part of the joint, till they acquire adhesions to the synovial membrane, and cease to occasion trouble. I know one case in which this fortunate result appeared to take place; the supposed foreign body was by a circular bandage retained in the synovial *cul de sac* above the patella, and gave rise to no annoyance during the two years in which I was acquainted with the patient after the bandage was discontinued.

OBSERVATIONS ON SCURVY

AS IT WAS DEVELOPED

IN BATH AND ITS NEIGHBOURHOOD, IN
THE SPRING OF 1847.

By JOHN BARRETT, Esq., F.R.C.S.

(Read at the Quarterly Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, December 21, 1848.)

In the autumn of 1847, I promised Mr. Farr,—to whom both the public and the profession are much indebted for his valuable share in the “Registrar-General’s Annual Reports”—that I would endeavour to obtain some information on the appearance of the land scurvy in this city and neighbourhood; and with this view I sent a number of questions to various medical men whom I thought likely to assist me in the inquiry, and I have to acknowledge the courtesy and readiness with which they have given me their replies.

The land scurvy made its appearance in Bath and its neighbourhood about the middle of May, and had disappeared, I believe, by about the end of July,—that is, I do not learn that any new cases occurred after this date, though the old ones were several of them still unrecovered. I do not mean to say that none of those cases occurred before May, presenting symptoms which, strictly speaking, constitute the first stage of land scurvy, and to which I shall presently advert, but up to this period those symptoms universally recognized as land scurvy had not arisen. Thus Mr. Gore, in his weekly report to the Board of Guardians, of the state of health in the Union House says, May 29th:—“From some symptoms I have observed among the boys, I am impressed with the belief that they are beginning to suffer from the want of fresh vegetable food—ill supplied by the use of rice. Fresh lemons ordered for four of them who show signs of scurvy.” But on June 6th he reports “six cases of land scurvy, one at least dangerous; independently of these, other inmates of the ward show more or less tendency to the same conditions.”

One of my questions was—“Did you meet with cases in which, though there may not have been the swollen, red and bleeding gums, there was an anæmic state, attended with muscular or lumbar pains, waxy pallor, tendency to swelling of joints, weak pulse, languid respiration, tendency to fainting, and these symptoms unaccounted for by any particular loss of appetite or drain on the system?” Another question was—“Did you find that the diseases of the lower orders were, generally speaking, of an anæmic type?” And from the answers given to these questions I am led to conclude, that though the more marked symptoms of spongy bleeding gums, ecchymoses in the course of the tendons, &c., were not observed till May, there had been during the

spring, (to use the words of Dr. Shapter, in his interesting communication to the *Provincial Journal* at this period,) “indications of departure from the normal and healthy state of the blood, differing only in degree from that more marked deterioration in this fluid characteristic of the confirmed disease.” I call your attention to the date of its marked appearance, because, according to Huxham and Lind, in their day, the latter part of the winter and the beginning of the spring was the time of its appearance. Probably the reason that it was observed in Bath at a later period of the year than that mentioned by writers of the last century, is to be found in the difference of the food. Undoubtedly the potato in our day is used to an extent it never was before. Formerly, therefore, when from the winter, people had been deprived of fresh vegetables for some months, they began to experience scurvy at the end of that season; but in our day, the potato being used during the winter, takes the place of fresh vegetables, and when towards the spring, from the insufficient supply, the price puts it out of the reach of the poor, then between the period which elapses before fresh vegetables come in, that state of constitution arises, which terminates in direct scurvy under other circumstances favourable to its development. The cases I observed myself occurred about the end of May, and their history made good these observations.

To ascertain with any degree of exactitude the extent to which land scurvy prevailed, it would be necessary to determine the number of those cases already referred to indicating the same diathesis, but in a lower degree. I need hardly remark that this would be impossible, but from all I can learn from conversational or written inquiry, this diathesis did obtain to a very great extent in this neighbourhood in the early part of the year 1847. My brother, Mr. C. Barrett, surgeon to the Tisbury Union, informs me that about this time, a few cases of acute inflammation, when actively depleted speedily changed to the typhoid state, and a few days before death there were several blebs on the skin—those of pemphigus, except that their contents were a dark bloody serum. He had no severe cases of land scurvy, but there were many patients who suffered from the early symptoms. He remarks that there was a more than usual prevalence of purpura hæmorrhagica; and the same remark is made by Mr. Shorland, surgeon in the Westbury Union, who did not recognize any cases of land scurvy in that neighbourhood. Mr. Cockey, surgeon in the Frome Union, had two cases of land scurvy, and a friend of his met with several cases of purpura hæmorrhagica. In the Keynsham Union, Mr. Hutchins observed several cases of land scurvy, but not of purpura hæmorrhagica; none of the scurvy cases were fatal. In the Camely Union several cases of land scurvy were observed by Mr. Perrin, two of

which proved fatal. In the Bradford Union House, Mr. Highmore had sixteen or twenty cases; none were fatal.

I think it is questionable whether what is called purpura hæmorrhagica by these gentlemen, was not in reality land scurvy. It is not to be denied, that to most of us land scurvy was a new disease, and I consider the profession much beholden to Dr. Shapter for calling attention to it at the early period that he did. That some cases were returned as purpura hæmorrhagica, which were land scurvy, I can state with certainty, and I am free to confess that I did not immediately recognize its true character in the cases which came under my care. Whether there be any, or what is the essential difference, between purpura hæmorrhagica and land scurvy, I shall presently consider. I have taken some trouble to ascertain the number of cases of recognized land scurvy which occurred in Bath and that part of its neighbourhood comprised in the Bath Union. The population is upwards of 70,000, of which about 10,000 are agricultural. In the reports of the surgeons of the Bath Union, sixty cases are reported in the workhouse, and only two out of the house amongst the paupers; of these only two were fatal. At the Bath United Hospital no cases occurred;* at the Bath General Hospital three, one of which proved fatal. At the other medical charities as far as I can judge, there may have been twenty-five cases, and I think that if I say about 120 recognized cases of land scurvy occurred in the district comprised by the Bath Union, I am about the mark. This would take in the cases met with in private practice.

When I commenced this enquiry I expected to find proofs of a prevalence of diseases of hæmorrhagic character. Such has not, however, been the case. Only two cases of purpura hæmorrhagica, and fifteen of other diseases of hæmorrhagic character, such as epistaxis, hæmatemesis, &c., including apoplexy, are to be found reported as occurring at the Union House, during 1847, the average number of inmates being 750. The number reported as occurring in the different districts of the Union during the same period, is two cases of purpura hæmorrhagica, and twenty-one of hæmorrhagic character, whilst the number of medical cases in the first quarter of 1847, out of the house, was 663.

At the Bath United Hospital, out of 14,918 cases, only one was a case of purpura hæmorrhagica, and forty-one what I have called hæmorrhagic. At the Western Dispensary, out of 958, only three were hæmorrhagic; and there was no case of purpura hæmorrhagica.

* In the conversation which followed, Dr. Davies stated that he had, as Physician to the Bath United Hospital, two cases which got well under the use of lemon juice. My information was derived from the books of the Hospital, in which no cases are entered.

I think I am therefore justified in saying, that during 1847 there was rather an absence than a tendency to hæmorrhagic disease. What then is the nature of land scurvy? Dr. Budd, in his article "Scurvy," in the "Medical Library," says, p. 93, of scurvy and purpura, that they are "essentially different; they arise from different causes, they differ in the circumstances and mode of attack, and they require different treatment. We have already stated that the essential cause of scurvy is prolonged abstinence from vegetable juices, and that the approach of the scorbutic habit is very gradual; purpura, on the contrary, often appears suddenly, and in many cases it cannot be attributed to any peculiarity in diet. Scurvy, when occurring on land, is, from circumstances we have before mentioned, met with almost exclusively at the end of winter, or in the early part of spring; purpura, on the other hand, is most common in summer and autumn. The livid and spongy state of the gums, which is pathognomonic of scurvy, and which, as well as the sallow and dusky hue, is a constant symptom of that disease, is not observed in purpura. Lastly, in scurvy, bleeding always does harm, and the disease is speedily cured by the use of succulent vegetables and fruits; while in purpura the abstraction of blood is often followed by relief, and the antiscorbutic juices are rarely, if ever, productive of much benefit."

I think that part of this diagnosis, resting on the character of treatment, is open to exception, but to this I shall have occasion to recur. On all hands it seems to be allowed, that land scurvy consists proximately in an altered state of the blood, which disordered state, says Dr. Shapter, "it would appear, from the investigations of Mr. Busk, mainly consists in the amount of fibrin, albumen, and salts and water, exceeding the proportion of health, while that of the hæmatosine falls below it." (*Prov. Journal*, 1847. p. 285.) That this is attended with, or followed very rapidly by, great debility, a general failing of the vital powers, and disorganization of the textures, must be allowed by all who have either witnessed cases of land scurvy, or read the accounts of it by others. Dr. Shapter says the disease "primarily consists in a peculiar state of anæmia," and I think this would express the view taken of it by Dr. Budd, in his interesting article on "Scurvy," in the "Library of Medicine;" but if we are to take anæmia in that sense in which it is generally understood by the profession, I think it is open to exception as a description of this disease. Thus we should say of a chlorotic girl that she was anæmic, and we should very few of us think of bleeding her. But I do not think that the facts and cases recorded bear us out in considering the anæmia of land scurvy parallel with this, though I think that Drs. Shapter and Budd consider it is.

Dr. Murray, in his interesting reports on the land scurvy when it appeared among our troops at the Cape

of Good Hope, in the year 1839, (*Med. Gaz.*, Vol. xx., p. 234,) says, "I have lately had an opportunity of seeing a good many cases of it in the civil and military hospitals here, and from what I have observed I think that physicians, divested of prejudice, who carefully study its pathology in *the book of nature*, will discover an intimate connection between it and disorders of the dyspeptic and melænic classes; and that by treating it as a primary sub-inflammatory or congestive affection of the chylipoietic organs, and rectifying gastric and hepatic derangement, direct improvement in the state of the blood (which is universally allowed to be vitiated in scorbutus,) will be the consequence, and various ameliorations in the nervous and vascular actions will speedily follow (if they do not even antecede,) this salutary change in the blood;" and his view of the nature of land scurvy appears to have been derived from, at any rate is borne out by, the success of treatment in accordance with it, as I shall presently notice.

Dr. Watson, in his last lecture on the "Principles and Practice of Physic," (*Med. Gaz.*, Vol. xxx., p. 958,) adopts the view of Dr. Budd, as to the essential difference of purpura and land scurvy. "I formerly regarded," he says, "the two affections as being identical, or as mere varieties of the same disorder; but it is not so." And he then refers to Dr. Budd's article. But it appears to me that his own successful practice might have shown him that the distinctions laid down by Dr. Budd between the two diseases, are hardly founded on reality. He mentions a case occurring under his care at the Middlesex Hospital, in the summer of 1830, where such cases were, it would appear, at that time exceedingly prevalent.

"The patient, a blacksmith, 35 years old, was covered with round purple spots, of various sizes, and with irregular blotches of ecchymosis. He had vomited blood on the preceding day. He was continually coughing up blood at the time of his admission, and his wife estimated the whole quantity that he had then lost to be more than half a pailful. The interior of his mouth and palate was pouring forth blood from a number of livid fungous tumours, formed by the extravasation of blood into the cellular tissue beneath the membrane, and the subsequent rupture of that membrane. He was passing blood by the bowels, and his urine was loaded with blood. Here were the symptoms of scurvy strongly marked. In the man's history we could trace its peculiar cause. He had long been subsisting on very poor and insufficient nutriment, seldom eating any meat, but living almost entirely on tea and coffee, and bread-and-butter. He had been too ill and weak to work regularly, yet he had been obliged occasionally to over-exert himself to obtain a scanty supply of food for himself, his wife, and a large family of children. He had been a settled dram-drinker, but for some time had taken much less of that stimulus, merely because he had not the means of procuring it. His pulse was frequent and feeble." This patient was saved. "He was immediately put upon a diet of roast meat, and began to take daily half-a-pint of fresh

lemon juice, diluted with a pint-and-a-half of water, and some tonic medicine."

But Dr. Macmichael, in "Some Observations upon Land Scurvy," read before the College of Physicians April 25th, 1831, evidently referring to this case, says, "Dr. Watson's patient also was bled. And a boy admitted for scurvy under the care of Dr. Hawkins was bled, and used calomel and opium: here, too, the disease was cured." (*Med. Gaz.*, Vol. viii., p. 185.) Both he and Dr. Watson (in his lectures,) refer to a case of Dr. Latham's, at St. Bartholomew's Hospital, termed "*Purpura Hæmorrhagica*":—

"February 12th, 1828. John Davies, aged 37, a linen-draper's shopman: every part of the body sprinkled over with purpurous spots, from the size of a flea-bite to that of a silver sixpence, and all of a livid colour; in the largest spots the livid colour is deepest at the centre, and fades towards the circumference. There are, besides, several darker patches upon the extremities, of a dusky hue, as if from a bruise. The gums livid and spongy, and blood oozing from their margins in contact with the teeth. The whole tongue livid, and one half presenting the appearance of a large, black, bleeding fungus, shooting from its surface, and the other half the same appearance in circumscribed spots. On the inner surface of each cheek several black fungoid patches. The soft palate clotted with black spots. Countenance sallow; conjunctiva rather tinged with bile, and having a small ecchymosis at the inner angle of each eye." To these symptoms were added vomiting and purging of blood. "He feels a consciousness of strength, and a great appetite for food, greater than in health. There is a fetid smell about him. Pulse 120, rather small but hard. Much general anxiety." (*Med. Gaz.*, Vol. i., p. 544.)

The treatment consisted of bleeding to fifteen ounces, and two grains of calomel at a dose, and afterwards of seven grains of Hydrargyrum cum Creta, in doses of two grains and a half every six hours. He rapidly improved from this treatment.

Now, where is the essential difference in these cases: both present very much the same features, and are relieved, at least one of them, undeniably and in a marked manner, by the very remedies, one of which (bleeding,) it is stated always does harm in scurvy, whilst "mercury," we are subsequently told by Dr. Budd, "in every form should be religiously avoided?" ("Libr. of Med.," p. 94.) I do not say there are no points of difference between the cases, for in Dr. Watson's case the affection came on gradually in a state of want, and in Dr. Latham's it appears to have occurred somewhat suddenly, and there is no mention of destitution. In both there seems to have been the bleeding gums, and that bloody kind of tumour which has had the name of bullock's liver given to it, and which I shall presently mention as having occurred in this neighbourhood. The terms hot and cold scurvy given to this complaint, show that it is not always of a passive character.

Dr. Budd says, (p. 81,) "We have more than once observed, in sailors admitted into the *Dreadnought*, on account of scurvy, an extensive bruise mark on the knee or ankle, to which a blister had been applied some time previously, under the idea that the pains which the patient suffered in the limb, and which in reality were scorbutic, were owing to inflammation affecting these joints. In such cases the blister rises well, discharges serum as usual, and heals readily; but in the course of some days the patient finds the part tender to the touch, and by observing that it is the seat of an extensive deep violet-coloured spot, first discovers the real nature of his complaint." But sometimes this inflammation is not imaginary. In two cases I attended at the same time, swelling of the knee-joint occurred; in one, a man, both knees were swollen and weak, rather than painful; in the other, a woman, the left knee was swollen and painful, in short, presenting all the usual characters of synovial inflammation, and as such came under my care. It was only from the dark stains in the course of the hamstrings that I suspected the true nature of the case, and on examining the gums, and questioning her as to her food, &c., I found the appearances and history of a well-marked case of land scurvy; still I treated this local affection as synovial inflammation, and relieved it, for I should remark that she was under my treatment some days before I observed the appearance of the hamstrings, when I put her on citric acid, which, whilst I continued my attendance, was employed with advantage. But Dr. Budd himself remarks, that these extravasations are not altogether of a passive character. He says,—*"The fluid poured out is not pure blood, which always remains soft, and in some measure liquid; nor serum, which causes œdema; but a fluid which glues the parts together, and gives a feeling of hardness."* And he says of hot scurvy,—*"In such cases when blood is taken from the arm, the clot contracts firmly, and has a buffy coat;"* but, he adds, *"it is to an inflammatory action, connected with the presence of these effusions, that we are inclined to attribute the fever in such cases."* For the case of inflamed knee I have mentioned, the extravasations in the course of the hamstrings were neither sufficient nor likely to produce synovial inflammation of the knee, and consequently, I look on such inflammation as a symptom of the disease,—as a more aggravated form of that affection of the joints common in these cases, and from its active character, indicating that the original disease is sometimes active. And when we remember the close similarity of the symptoms in the cases of land scurvy and purpura I have mentioned, as treated by Drs. Watson and Latham,—that in both these cases blood-letting, and in one of them also, mercury, was employed with advantage,—that in other cases occurring at the Middlesex Hospital at the same time as Dr. Watson's, these depletory

remedies were also successfully employed, we shall, I think, conclude that there is not so evidently an essential difference between the two diseases, at any rate, that we cannot found this difference on a treatment peculiar to each, but that at least sometimes land scurvy greatly resembles purpura, not only in particular symptoms, but also in that both are remediable by treatment of the depletive character, the value of which, in purpura, I would remind you, was first pointed out by a Bath physician, and consequently, that both occasionally partake in the same, that is, sthenic, diathesis.

This question of the nature of the disease is no mere theoretical one, and that must be my excuse for dwelling so long upon it. Good common sense is, I believe, so distinctive a feature of medical men, that there are few of them who would long allow theory to contradict the plain indications of disease; still misconceived notions will naturally have their weight, and in a disease which is not of every day occurrence, it is doubly necessary that our preconceptions of its nature be correct. What then is the indication of treatment in land scurvy? If it be originally an asthenic disease, we shall use sthenic treatment, but if its asthenic character be not primary, but rather the result of original derangement, then there may be a stage, and there may be cases presented to us, in which depletive treatment is necessary. Nothing can be more distant than the views taken on this very practical question. On the one hand Dr. Budd says, (*"Library of Medicine, p. 94,"*) *"Bleeding should never be had recourse to, although acute pains, heat of skin, quickness of pulse, and other febrile symptoms of a dangerous hæmorrhage may seem to render it advisable. In advanced stages of the disease patients do not survive it; blisters are apt to produce gangrene, and for this reason we should abstain from their employment. Mercury, in every form, should be religiously avoided; even in very small quantities it has been known to produce dangerous salivation. We have met with instances in which scorbutic symptoms seemed to have been much aggravated by mercury taken before the scurvy made its appearance. The ill effects of this medicine are indeed noticed by most writers on scurvy; and Kramer, who was physician to the imperial armies in Hungary, from 1720 to 1730, relates that of 400 men affected with genuine scurvy, to whom, on the advice of Boerhaave, mercury was given, so as to induce salivation, not one survived."* Nothing can be stronger than the words of this old author;—*"Beware of bleeding: shun mercury as poison."* But when we turn to the army reports, furnished by Dr. Murray, we find just as strong a recommendation of the antiphlogistic treatment. Thus Mr. Samuel Bailey, surgeon, R. N., says,—*"I shall briefly state, that since the beginning of this year, I have made a fair comparative trial of the tonic and antiphlogistic modes of*

treatment, in sea scurvy, and that the superiority of the latter has been very marked. To a certain number of the cases I allowed a full ration of fresh meat, with soup, tea, bread, vegetables, fruit, (*i. e.*, grapes and lemons,) and beer, and gave them occasional doses of aperient medicine and quinine; and to another certain number labouring under similar symptoms, I ordered low diet, without any animal food, but with the same allowance of vegetables and fruit, and treated them medicinally by small bleedings, (where the breathing was oppressed,) mercurial alteratives, antimonials, and a full purgative dose of Epsom salts every morning. The result was, that in the former the oppression of bleeding did not subside; the appetite in the majority failed; their strength and activity improved very slowly; indeed, in two individuals, rather diminished; their skin kept dry and rough; their gums continued spongy; the lividity, weakness, and rigidity of the limbs, made scarcely any progress towards recovery; their despondency and unhealthiness of complexion continued; their sleep was unrefreshing; in short, their convalescence was protracted, and very imperfect, whilst those under the antiphlogistic plan (who, by the by, grumbled sadly at first at their getting low diet, as the others had full,) recovered in a very rapid and satisfactory manner. Their appetite and strength improved daily; their breathing became free; their countenance clear and lively; their pulse, urine, and alvine secretions, natural; and I may say, most of them were fit to be discharged to their duty before those on the tonic plan were able to leave their beds. These patients were carefully watched by some of my medical friends, known for their independence of thought and talent for observation, who all perfectly agreed with me as to the superiority of the antiphlogistic treatment."—*Medical Gazette*, vol. xx., p. 235.

The same plan of treatment, with occasionally mild mercurial treatment, with the same happy results, was adopted by other medical officers at the Cape, and the detail of the symptoms would leave no doubt on the mind that the disease they were treating was the same as that in which bleeding and mercury have been so strongly condemned. One of my correspondents, Mr. Perrin, of Camely, surgeon to the Union House, met with several cases of land scurvy in the workhouse and district, attended with spongy bleeding gums, and in the advanced stage, sloughing of the cheeks to a frightful extent. At first he treated it too much as a disease of debility, and ordered tonics, with lemon juice, and potatoes, but with little success. Afterwards he used rhubarb, and Hydrargyrum cum Creta, pretty frequently, with now and then a brisk purge, and good strong lotions of alum water, and found himself much more master of the complaint than under the first plan of treatment, and without the potato or lemon. Two cases were fatal, and he considers that he put these on the stimulant and tonic plan too soon,

though in all cases, of course after due attention to the bowels, he made their living generous, for he remarks, that the diseases of the last year were all decidedly of an anæmic character, and very few stood steady depletion for any length of time.

There is certainly no small difficulty in reconciling these different views of treatment; I would, however, suggest, whether the cases coming under Dr. Budd, at the *Dreadnought*, and which were principally seamen from merchant vessels, are not likely to have been in a more advanced stage of the disease, and consequently, with the powers of life more broken down, than the patients of medical officers at the Cape, or than my correspondent, Mr. Perrin's patients. They probably had, for some time before treatment was commenced, been suffering from it, and the stage in which depletion is right may have passed, and have left a state in which it could not be borne. We know how much the question has been mooted, whether bleeding is right in cholera. From cases which came under my observation, whilst a pupil in town, I was satisfied that there was at least sometimes a stage in which it might be used with advantage, but this rapidly passed off. I do not mean to say that in land scurvy this stage passes off with anything like the same rapidity, but merely that cases of decidedly the same disease may have been differently treated with success, from their being met with in different stages; and I am the more induced to take this view of the difference of opinion by observing, that one of the medical officers at the Cape, who seems to favour the tonic plan, was surgeon to the hospital where the patients affected with land scurvy were received from the outposts; they were not cases originating in the hospital, and consequently had been some time affected when they came under his care. "I have no doubt," he says, "that had either bleedings, or strong saline purges, been used in the severe cases, they would have sunk; and I further think, that if a vein had been opened, it would not have united; in short, that the antiphlogistic practice would not have been advisable in any of these cases. The rapidity of recovery effected by change of air, comfortable quarters, the liberal use of port wine, and such like treatment, was surprisingly great, except in the man who was in a moribund state at the time of his admission into my hospital."—*Medical Gazette*, vol. xx., p. 942. It appears to me that this may be perfectly correct, and yet that these very cases may have previously presented symptoms indicating depletion.

The practice at the Cape, which consisted principally in bleeding and saline purges, was, in truth, antiphlogistic. Mercury does not seem to have been often used; but I have brought forward proofs that it may be used with advantage in this disease, though proscribed in the strong language I have quoted from the old author Kramer, and adopted by Dr. Budd. "Shun mercury as you would poison." Perhaps, if

Dr. Budd's objection to it be founded on practice, it may bear the same explanation I have given of his objection to bleeding,—that his cases had passed the stage when depletion could be borne; and in judging the value of an opinion on the use of mercury some hundred years ago, we must take into consideration the modes of employing it now, and then. A knowledge of what mercury can do when properly used, and what it will do when improperly used, is amongst the best proofs of our improvement in medical science—it is at once the most remedial and destructive agent we can employ, because its effects are most definite; and if Kramer saw it used in land scurvy in anything after the fashion it was used amongst us some fifty years ago, it is no very great wonder he should have reprobated it in a disease so rapidly tending to depression.

But there is one remedy which has met with nearly universal approbation—citric acid or lemon juice; it would appear to have been used by the medical officers at the Cape, in conjunction with their antiphlogistic plan; and all parties seem to consider, that whatever may be the proximate cause of the symptoms of land scurvy, and consequently the indications of treatment to be derived from diathesis, the primary cause is the want of some principle in the animal economy which an organic acid supplies, and that none is equal to the citric acid. In the cases which came under my own treatment, but which were not aggravated in their symptoms, I found the citric acid of commerce sufficient. Mr. Harries, of this city, informs me that he did also, though he continued it for a long time it would seem before it fully effected a cure. But some of my correspondents employed the fresh lemon. Mr. Gore ordered fresh lemons and green vegetables for the cases at our Union House.

Mr. Highmore, of Bradford, first treated the disease in the Bradford Union House by a total change of diet, giving fresh vegetables, and citric and mineral acids, quinine and other tonics, *without the slightest success*. He then obtained a supply of lime juice, which was given to all the children, healthy and diseased, two ounces to each daily, with sugar and water. After the first few days from adopting this plan, no fresh case occurred, and it was sufficient to cure those already ill, some of whom were in a most pitiable condition, the spongy bleeding gums overlapping the teeth, and the cheeks, in two cases, deeply ulcerated. But other acids were employed with success.

Mr. Foster, the surgeon to the Taunton Union House, informed me that he made the patients there drink rough cider, and eat plenty of fresh vegetables, and they got well. My brother, (Mr. C. Barrett,) in the Tisbury Union, employed sulphuric acid, vegetable diet, and tonics, with speedy relief. Dr. Lindoe, physician to the Walcot Dispensary, met with about a dozen cases which he recognized as land scurvy, but he states that he found more than a usual prevalence of purpura

hæmorrhagica. His treatment consisted in saline diaphoretics, with acidulated drinks, followed by vegetable tonics and diluted mineral acids. Dr. Samuel Edwards, of London, late physician to the same dispensary, writes me that he treated his cases, which were not aggravated ones, on the tonic plan, vegetable bitters, with mineral and vegetable acids, but, above all, the "Charity Ball" tickets, by which means he was able to supply good meat soup, meat, and sometimes vegetables. Mr. Hutchins, surgeon to the Keynsham Union House, where the disease appeared, informs me that medicines were not generally well borne. He used alteratives, slight purgative, tonics, with light nutritive diet and stimulants. His cases were of slight character.

(To be continued.)

CASE OF EMPYEMA,

IN WHICH NINETEEN PINTS AND A HALF OF PUS WERE REMOVED BY AN OPENING MADE INTO THE CAVITY OF THE CHEST, WITH REMARKS.

By JOHN TUCKER, Esq., Surgeon to the Exeter Dispensary.

(Read to the Devon and Exeter Pathological Society, at the Exeter Dispensary, February 2nd, 1849.)

The attention of medical practitioners having been of late frequently called to empyema and paracentesis thoracis in several of the medical publications, induces me to relate to the members of this Society a case which some time since occurred in my practice. There are many remarkable circumstances with which it is connected, so that I venture to anticipate a brief report of it will not be considered as uninteresting by the majority now assembled.

On the 30th of June, 1837, James Tucket, aged 26, of Ashton, in this county, consulted me. A few days previously he returned from the Island of Jamaica, where he had spent the last six years in the capacity of an overseer, which in the West Indies is understood as the manager of an estate. I had known him well before he left England, when he was in rude health and had never shown any predisposition to disease. The change now, however, which had taken place in his constitution, forcibly struck me, for his general appearance was that of a person in the last stage of phthisis, and so were his symptoms, for he had a most harassing cough, great emaciation, pulse 130, cedematous state of the legs, and expectorating daily from a pint to a pint and a half of purulent matter.

The history he gave me of his case was as follows:—That for more than twelve months he had been in an ailing state, suffering from boils in various parts of his body, which were relieved by occasional doses of blue pill and laxative medicine. These disappearing, slight pains were often felt in the left side just below the ribs, and which increased when he coughed or laughed.

He was advised to wear a belt tightly buckled around him, and to rub a liniment composed of camphor, hartshorn, and turpentine, with a little oil. This gave him relief so that he was able to follow his occupation on horseback. On August 3rd, 1836, was on horseback during the greater part of the day; went to bed at nine o'clock fatigued, but quite free from pain, and fell asleep. At 12 o'clock he awoke with violent pain in the left side just below the ribs, and was unable to lay in the horizontal position. So great were his sufferings, that at break of day he sent for the medical attendant of the estate. He was bled to faintness, and had given him some calomel and antimony with purgative medicine. For the time he was much relieved, but as there were frequent spasms in the side, and tenderness on pressure, a large blister was applied and kept open. Every attention was paid to diet and to the action of the bowels. On the 20th, the pain in the left hypochondriac region again returned with great uneasiness about the blade-bone and up the neck, accompanied with difficulty of breathing, evacuations quite white. Was again bled largely and a good-sized blister applied over the affected part. Several blisters were had recourse to and he took a good deal of calomel and laxative medicine. Was much relieved and remained in a convalescent state till about the beginning of April, 1837. At this time he discovered a tumour in the left side, under the ribs, which increased to the size of a foot-ball, very hard, and if pressed caused him a great difficulty of breathing. Severe rigors came on, and he was at times feverish, lost his appetite, became thinner and legs much swollen. Was advised to visit his native country, and on the 11th of May went on board ship for that purpose. On the fourth day a gale of wind sprung up, which caused considerable sea-sickness, and during the act of vomiting the tumour in the left side suddenly left him. This was followed by the greatest difficulty in breathing, almost amounting to suffocation, was unable to lay down in his hammock, and the only relief he could find was in an erect posture. In this state he remained until the 18th of May, when a very large expectoration took place on a sudden, and which gave him considerable ease, and he was able to respire more freely. At this period the cough become most harassing, in fact it never ceased, caused by the constant and great expectoration. He came on shore June 21st, and made the best of his way into Devonshire.

June 30th. His father brought him to my house, and in the state already described. I thought it right to examine the chest first by measurement, with a tape, just below each nipple. The entire was forty-one inches and a half. On the right side I found it nineteen inches; on the left, twenty-three and a half, with considerable more rotundity, and the intercostal spaces were much wider apart. Secondly, with the stethoscope. In neither region of the left side could any sound be heard, and by percussion every part was dull, but on the right the respiration was generally audible, and what Laennec has called puerile. The position of the heart was towards the right side, and in no part of the left could its pulsations be felt. There was no doubt in my mind as to the nature of the case,—viz., that a large collection of fluid

existed in the chest, and the only remedy which I held out to him was its removal by an operation. This I explained to him and his father, but at the same time advising that some other medical practitioner of eminence should see him with me in consultation. Dr. Macgowan was fixed on, who, after making every enquiry, and minutely examining the chest, came to the same conclusion as I had. Several of my medical friends subsequently saw the patient, and we all agreed. The poor fellow could not make up his mind to submit, and all that was done was to sooth and allay his symptoms with large doses of hyoscyamus, and the different preparations of opium. In this state he went on, occasionally coming to Exeter, but evidently getting weaker and more emaciated, until September 20th, when he took lodgings, having resolved to submit to anything I suggested, for his distress was such, to use his own expression, that he preferred death.

On the 30th of September I performed the operation by an incision between the seventh and eighth ribs, an inch in length, in the presence of Dr. Macgowan, and my pupils, Messrs. Macdougald and Roberts. The pleura was astonishingly thickened, and on being punctured, gave exit to five measured pints of purulent and most offensive matter. Becoming very faint, we placed him in the horizontal position, and administered a little wine. The relief he experienced was very remarkable, for his cough immediately ceased, and he was enabled to lie on his back. In the evening I visited him again, and found him very comfortable and grateful for the relief which had been afforded him. I forgot to mention that in the opening a pledget of lint was put when the faintness took place. As we were quite aware that a large quantity of matter still remained, I thought proper to place him on the left side, and remove the lint; about four pints and a half of pus was evacuated. Previous to the operation the pulse was never under 110, but after, and at this visit, I found it at about 80. The dyspnoea was now quite gone, so that he could lie on his back without distress, which he had not been able for at least twelve months.

October 1st. Has slept many hours, and had no fever. Removed the plug, when about two pints flowed from the wound.

4th. Complaints of oppression over the chest. Took away the lint, but nothing escaped.

6th. In great distress; pulse 120; and unable to lie on his back. Passed a common-sized trocar into the wound, and removed two pints and a half of the same kind of pus. He passed a tranquil night, and was again able to lay with comfort on his back.

7th. Considerable derangement of the digestive organs; vomiting and purging, of a green bilious matter; cough increased, and expectoration of a yellowish green fluid. This caused great exhaustion; however he rallied by the 11th, and left Exeter for his own home, which is about eight miles, on the 13th.

I visited him on the 16th, and found all his symptoms had returned, and the legs again becoming oedematous.

On the 18th, finding him in great distress, I advised another puncture to be made; this I did between the ninth and tenth ribs, about six inches from the spine, with a

CLINICAL ILLUSTRATIONS.

ON CORRODING ULCER OF THE UTERUS:
CASE AND REMARKS.

By EDWARD BALLARD, M.D., of Leamington,
Late Senior Physician to the St. Pancras Royal General
Dispensary, and Medical Tutor in University College,
London.

The difference of opinion which exists among medical authorities respecting the nature of that disease of the uterus which passes under the name of corroding ulcer, induces me to furnish the narrative of a case which occurred in my own practice. The publication of it was further suggested to me by the appearance, in the first number of the Journal for the present year, of a clinical lecture on the subject, by my friend Dr. Heaton. I may premise respecting the rarity of the affection, that it was the only case which occurred to me during the five years that I was attached to a large public dispensary, although numerous cases of cancer, and simple ulceration of the womb, presented themselves for treatment.

CASE.

Frequent Miscarriages; trifling Hematuria; sudden Vomiting, with Pain in Loins, &c.—Vaginal Discharge; Ulcer of Cervix Uteri; Cystitis; Vaginitis; Discharge of Urine by Vagina; Death.—Post-mortem examination:—Corroding Ulcer of Uterus; Communication between Vagina and Bladder; Cancerous Deposit, &c.; Ovarian Cyst; Ulcers, &c., of Gullet, &c.

A. G., aged 50 years, residing in a tolerably healthy part of Somers Town, but six years before had been living on the banks of the Regent's Canal, where fogs and mists were almost continual, except in very fine weather; of lymphatic temperament and cheerful disposition. No hereditary taint to be traced. She placed herself under my care, at the St. Pancras Dispensary, on May 18th, 1846. The history taken at that time was as follows:—So far as can be ascertained, her habits have been temperate. She has, during the last few years, undergone some amount of privation, but has always been adequately clothed. She has been married twenty-five years, and her husband is living. Her first child was born fourteen months after her marriage. The labour was protracted over three days and nights, but she was ultimately delivered without instruments. She then suffered one or two miscarriages, and in three years after had another child. This labour was favourable, but was followed for three months by a thick, yellow, and exhausting vaginal discharge. Since then she has had four other miscarriages, at early periods of pregnancy, not accompanied by much flooding; the last was four years ago. The catamenia commenced rather late,—namely, between eighteen and nineteen years of age; for the last eight or nine years have occurred at more prolonged periods than formerly, and although latterly clotty, have not become more abundant.

With the exception of slight catarrhal affection, her

middle-sized trocar, when five pints and three quarters of most offensive matter rapidly escaped. Now I determined on keeping in some hollow tube, and I passed about two inches of an elastic-gum through the canula, which I withdrew, leaving the former, plugged with a bit of wood. Previous to my leaving him I thought proper to substitute the canula of an hydrocele trocar, which I had prepared, with four holes at the shoulder, in order, with tape, to tie round the body: into the opening I also passed a plug, and instructed him how to use it, if any distress occurred. From day to day he did so, and at each time three or four ounces escaped.

On the 21st I again visited him; found him in excellent spirits; little cough, and was not at all distressed when laying on his back.

On the 28th I again saw him, and was surprised to see the alteration which had taken place. He was down stairs, and felt quite convinced he should recover. Appetite good; little cough; sleeps well; pulse 75; is gaining flesh; takes a good deal of raw milk; no oedema of the extremities. Removes the plug from the canula about every third day, and evacuates two or three tablespoonfuls of fluid.

On the 10th of November was enabled to ride to Exeter and back again in a spring market cart. Still continues to mend, and is looking healthy.

For several months I did not see him, but heard that he still kept the canula in his side, and was very well.

In September, 1838, was so very much recovered as to enjoy the sports of the field; he was cautioned, however, to be careful in every respect. The winter he passed well, had regained his strength, still wearing the canula, and occasionally taking out the plug.

In the spring of 1839 was so well as to return to the West Indies, since which he has married, and is the father of two children. A few months since he wrote me a grateful letter, stating his perfect restoration, that he was the manager of a large estate, and often tired three horses a day. Up to the present period he still wore a canula, and as it caused no inconvenience to him, intended to do so. Of so corrosive a nature was the secreted matter, he informed me, that besides the instrument I gave him, he has been obliged to purchase four since. In my reply to him, I advised a canula made of platina; whether he has procured one of this metal I am unable to say.

Thus favourably has this case terminated; and when all the circumstances are borne in mind, little doubt will exist but that originally a large abscess formed in the liver, which made its way through the diaphragm, and ultimately into one of the bronchi. Instances of the kind are not very rare of patients having survived; but my firm belief of this young man is, that had not the operation and subsequent practice been adopted, his life would not have been spared.

health has been, on the whole, good. Depression in her circumstances has preyed much upon her mind for the last seven years, but she continued in her usual state of health, making no complaint whatever up to the beginning of the last month, (April.) She states that on a Monday, at that time, she became wet through, and on the following Thursday walked a distance of two miles, to visit a friend. She felt very tired, and partook of some warm ale, and while returning, and near her own house, was suddenly seized with sickness and vomiting, accompanied by a dull aching pain across the loins, such as she used to experience when unwell. For some days before this attack her bowels had been irregular, and now became much confined, the stools being hard, and defæcation being accompanied by shooting pain. The house-surgeon of the Dispensary, and another medical gentleman, had seen to the freeing of the bowels about a fortnight after the attack, but up to the time of her coming under my care, the pain first complained of had been increasing. She states spontaneously that for some time the urine has been occasionally bloody, but she does not recollect whether this symptom preceded the occurrence of pain. For the last two or three years she has felt rather poorly in the spring, blood occasionally passing from the anus in small quantities, but disappearing after a dose of Epsom salts. During the same period, at spring and autumn, a watery vaginal discharge, occasionally bloody, has also appeared; it never had any smell. The catamenia appeared last on the 15th, and disappeared last night. They were very abundant.

She has lost flesh considerably since her attack; the lips and cheeks are pale, and the surface generally sallow; this tint, however, having appeared only since her illness. Complains chiefly of aching pain, extending from the loins down the back of the hips, and in the inside and outside of the thighs, sometimes accompanied by pain in the groin. Sometimes the pain is of a shooting character; it occurs for an hour before and after every stool. There is slight tenderness in the situation of the pain, especially behind the hips. The veins of both legs are very extensively varicose. She complains specially of the pain across the loins, when rising from her chair, leaning back in it, or on attempting to reach anything placed high above her head. Her pains are all worse when she first goes to bed, and do not leave her all night; worse also when sitting by the fire; but better if anything, when she is walking. Micturition is not painful, nor unusually frequent, but sometimes is rather difficult.

May 20th. Yesterday began to experience a sense of fullness, heat, and swelling in the vagina; some red discharge has appeared; slightly duller under right clavicle than under left; respiration rather defective under both.

22nd. The red discharge ceased yesterday, and now says that only a clear watery discharge remains; says the vagina feels full, "as if something as large as a nut were in it," and tender.

Vaginal examination.—On introducing my finger I could only perceive the base of the cervix uteri remaining,

the rest being replaced by an ulcer, apparently somewhat larger than a shilling, directed backwards in such a manner that the finger impinged at first upon its lower and anterior edge; the edge felt hard and irregular, and was very tender; the body of the uterus was felt beyond it, being somewhat anteverted. The introduction of the *speculum* gave great pain, so that the examination by this means was rather imperfectly performed. The part of the ulcer seen was deeply red on the surface, and a copious reddish watery discharge welled up from it. The vagina was healthy.

She had been taking up to this time only some gentian and bebeerine, and I merely ordered, in addition, that the vagina should be kept washed out with warm water, and a pitch plaster to be placed on the loins.

28th. No relief; urine contains no albumen, it presents a dense cloudy deposit, containing mucous corpuscles, epithelial scales, and a very few large nucleated corpuscles, which may be cancerous.

She now began to use suppositories of opium, and injections, containing the *Liquor Opii Sedativus*, which occasionally gave some relief to her pain, but the bowels became so difficult to manage that the use of these remedies was shortly suspended.

Towards the end of June, the pain and discharge continuing, with but little variation, she began to suffer, in addition, from sensations of pricking and shooting about the abdomen. The pain of the loins extended up the back, and settled in a great measure over the sacrum; and she began to complain of a sense of "tearing open" of the perineum and vagina. Her pains were all increased by any change in the weather. A liniment of tincture of aconite appeared to relieve her a little.

On the 15th September the vaginal discharge was, for the first time, noticed to present a disagreeable odour. All her pains have been much worse since the 12th, when a small black clot came from the vagina.

22nd. Pains very severe, with sense of bearing down; has passed another clot; sense of stiffness over the abdomen.

29th. She was compelled to keep her bed, and continued to do so up to the time of her death.

October 6th. Has been vomiting daily; great weakness; œdema of feet; complaints of aching pain in the left hypochondrium, with tenderness; tenderness also in the right flank, and below the margin of the ribs on both sides, and also over the hypogastrium; there has been slight diarrhoea the last two days; the cancerous odour obvious in the vaginal discharge. On physical examination of the abdomen, the liver was perceived to be much lengthened, and some solid organ, either the spleen or left kidney, was felt below the left false ribs. The pain in the left loin was relieved by the application of a few leeches.

9th. Some leeches were applied above the crest of the left ilium, for relief of severe pain in that situation.

13th. Complains of a burning sensation in the throat when she swallows, and points as its seat to the commencement of the trachea; aching pain over the whole abdomen, with general extreme tenderness and muscular

resistance to the pressure of the hand. Turpentine fomentations to abdomen.

14th. Pains all intense; urine contains pus and exudation corpuscles, octohedra and oval plates of oxalate of lime, phosphatic prisms and blood-disks. For some days past has been lying with the legs drawn up, and has been complaining very much of the severe sense of burning in the vagina; and there is excoriation at the top of the thighs from the discharge; tongue has been very tender for the last day or two. The burning sensations of the vagina, &c., were relieved by the use of warm fomentations.

During the last few days of her life the abdominal and lumbar pains appeared obscured, by the intense burning sensation in the vagina.

19th. The urine passed from the vagina with the discharge involuntarily, although some was still retained in the bladder, for the purpose of passing which she occasionally rose; the countenance became exceedingly anxious; the vomiting was incessant; the urine presenting a black gelatinous deposit of altered blood; the abdominal tenderness would not allow of any manual examination. She died on October 23rd.

The body was examined fifteen hours after death.

Emaciation considerable; but on opening the abdomen the liver was found remarkably (not extreme,) elongated, and all the abdominal organs very much displaced. The tumour beneath the margin of the left false rib was found to be the kidney. All this appeared to be due to a habit of tight lacing which she had contracted when young. The *omentum* was very small, and attached to a round tumour on the left side of the pelvic cavity; it was extremely thin, and contained no fat. With the exception of its altered shape, and a deep transverse constriction, the *liver* was healthy. *Stomach* perpendicular in direction; much narrowed; mucous membrane of the fundus reddened, mammillated, and thickened. *Small intestines* generally contracted in diameter; the mucous membrane of the ileum of a deep bistre tinge, becoming paler as the upper part was approached. The jejunum varied from a deep pink to a moderate bistre colour. Large intestine in the greater part contracted; its mucous membrane deeply reddened; some punctiform ecchymoses in the cæcum. As it passed into the *rectum* the mucous membrane was considerably thickened and corrugated transversely, increased in consistence, and presented small dots of a red colour, evidently the openings of granular follicles abundantly scattered over it. The *right kidney* was in its natural situation, but the elongated liver completely concealed it; it was considerably smaller than the left; pelvis much distended, so that some of the calyces were obliterated, the papillæ opening into the general cavity of the pelvis, which contained about half an ounce of pretty clear urine. Its capsule stripped off readily, leaving the surface of the organ smooth, pale, and faintly mottled; section pale; thickness between the pelvis and outer surface only a quarter of an inch. Cortical and conical portions both so pale and contracted that they were scarcely distinguishable, and very dense in consistence. *Ureter* on right side measured two inches in circumference. *Left*

kidney presented the pelvis less distended, and the other appearances similar to, but less marked than the right. *Left ureter* measured one inch in circumference. The *left ovary* formed a rounded tumour measuring two inches in diameter, adherent to the wall of the pelvis opposite the great sacro-sciatic foramen; it consisted of a stout sac containing a clear reddish liquid. The interior of the sac was lined by a membrane, in parts of a deep bluish black tinge, apparently due to ecchymosis, and projecting here and there from the wall were small kidney-shaped oval or round elevations more or less deeply red in colour; and semi-cartilaginous in consistence. The *right ovary* and *Fallopian tubes* were healthy. The *bladder* was contracted, and when opened along the anterior part was found to contain no urine. So much of its inner surface as was not in juxtaposition with the uterus was entire; but opposite the upper part of the vagina and lower part of the uterus, was an ulcerated gap by which the bladder communicated with that canal, the cervix and lower and anterior part of the body of the uterus being also destroyed. To such an extent had the ulceration at the top of the vagina proceeded, that in passing up the finger very cautiously it broke through it posteriorly and entered the cavity of the peritoneum in the recto-uterine pouch. On the inner surface of the bladder the large ulcerated opening was bounded by a hard thickened border, presenting an ash-coloured surface and flocculi, ash-coloured superficial sloughs being seen upon all the adjacent portions of the mucous membrane of the bladder. The opening was three quarters of an inch across. There was a second small opening about the size of a pea, lying to the right, and anterior to it and separated from it, by a thickened cord of dense tissue about a quarter of an inch wide, in which ran the right ureter. The base of the bladder was separated from the vagina by a mass of hardened thickened tissue, measuring about an inch in transverse direction, which formed the anterior border of the ulcerated aperture. At its two ends were the openings of the two ureters, much contracted, so that a blow-pipe could not be passed more than half an inch along them. The rest of the mucous membrane of the bladder was deeply reddened, and at the right side near the ulcer, was thrown into longitudinal wrinkles. The principal part of the membrane was of natural thickness and consistence. At the opening of the *meatus urinarius*, there were longitudinal red stripes of ecchymosis, one much elevated, and presenting when cut into, a clot of blood.

The uterus was about the natural size, congested on the posterior surface. The vagina was opened up from behind in order to display the full extent of the ulceration. The ulceration was then seen to have destroyed the cervix and to have extended a certain distance up the anterior part of the body of the uterus. The upper part of the vagina and the ulcer on the anterior part of the body of the uterus had opened into the bladder, in the situation above mentioned. The whole surface of the ulcer was very irregular and covered with ash-coloured shreds, as well as with a dirty reddish-brown mucus-looking secretion. The

vagina presented deep ulceration, also with ragged borders of various sizes; some of them, however, were quite superficial; they appeared to be independent of any morbid deposit. Cavity of the uterus of natural size, and mucous lining moderately congested. Tissue for about an inch below the fundus about natural in appearance, except being stained of a rather deep reddish tint to the depth of a couple of lines from the outer surface. Below this part, however, or for about half an inch above the ulcerated surface, this tint was general, deepening very much as the ulcer was approached, and presenting here and there little ecchymoses, especially adjacent to the uterine cavity. There was a rounded elevation on the surface of the uterine ulcer, whose section presented a semi-bluish tinge in points, mixed with natural tissue. Its texture was indurated. The tissue forming the septum between the bladder and vagina presented similar appearances, both exhibiting some abnormal deposit. Portions of this tissue placed under the microscope, displayed cells similar to those of cancer,

There were trifling, rather recent, adhesions of the apices of both lungs, especially observable, however, on the right side. No considerable disease in the heart or lungs. On the anterior wall of the commencement of the gullet, opposite the cricoid cartilage, were several linear shallow abrasions, varying in size but none exceeding a quarter of an inch in length. Accompanying these were little elevations, varying from the size and shape of a pin's head to that of a caraway seed, containing a pellucid fluid, one larger than the rest was situated close to one of the excoriations. These vesicular elevations were accompanied by obscure striated redness, and extended scattered scantily over four inches of the gullet below the cricoid cartilage. Laryngeal cartilages ossified.

(To be continued.)

PROVINCIAL Medical & Surgical Journal.

WEDNESDAY, MARCH 21, 1849.

We have inserted in another column, at the earnest request of the author, a letter on Medical Reform, in which it is stated that the subject "has not made its appearance in the columns of the *Provincial Journal* in a way that might have been reasonably expected." We have great respect for the author of the letter as a sincere well-wisher to the entire profession, and a most zealous and energetic advocate of reform; but, notwithstanding that many of his opinions are in the abstract correct, we feel quite assured that, in the present state of the profession, it would be impracticable to carry them out. No mere human institution is, or can be, perfect; nor with the manifold differences of opinion,

and the endless diversity in the constitution of the minds of men, can any system be devised which shall be to all equally acceptable. Under these circumstances, in any changes which may be now adopted, each sect, we might say each individual, will have to give up some, perhaps favourite, opinion, in order to secure the acquiescence of others in those general measures in which all are manifestly interested.

For instance, no one we believe questions the value of a registration of all duly-qualified members of the profession; but the form which this registration is to receive,—whether Dr. A., Mr. B., and Mr. C., men of first-rate character and standing in the several branches of the profession, are to be respectively arranged, in alphabetical order, with Dr. A., Mr. B., and Mr. C., equally qualified in the eye of the law, but professing homœopathy, hydropathy, or some other of the fashionable quackeries of the day, or whether separate class-lists are to be adopted, are points on which various opinions are entertained, and which it would seem are not easily to be adjusted. No one we believe will deny, that it would be far better to separate the trade in medicines from the practice of the profession; but whether this is to be done by giving up the dispensing of drugs altogether, or by a limitation of the charges of the dispensing practitioner to fees for advice and attendance, or whether, indeed, it admits of any arrangement at all without cutting up the practice of the medical man altogether in rural districts, or transferring a still larger portion of it to chemists and druggists in towns and densely-inhabited places than they have already appropriated, is very questionable. The public generally, and amongst them even many medical men, are advocates of free-trade in physic. With such views we see not how the general practitioner is to hold his ground against the retailer of drugs, or at any rate retain a large portion of the practice which he at present possesses. Were the profession now to be constituted for the first time, such difficulties would still exist, though perhaps not to the same extent as at present.

We are not, however, contending for these individual points, our object is to show that such diversity of opinion exists on these and other questions connected with Medical Reform, as to render the idea of the attainment of unanimity upon the entire question, without each party or individual yielding somewhat to

the opinions of others, altogether Utopian. It was with this conviction, therefore, that we hailed with satisfaction the late conference in London, and were disposed to receive the results, on the whole, as a considerable step towards the accomplishment of a re-construction of the entire profession, on grounds as favourable, perhaps, as could be hoped for. The conference would, no doubt, have been more influential had it embraced deputations from other bodies of the profession, as was indeed originally proposed by the Council of the Provincial Association. Two large bodies in particular were left unrepresented,—the provincial physicians, (Graduates of Universities, and Licentiates *extra urbem* of the Royal College of Physicians;) and the associated surgeons, members of the College of Surgeons, but whose privileges had been violated by the provisions of the new Charter. The Council of the Provincial Association immediately on becoming acquainted with the results of the conference, requested the opinion of those gentlemen who had thus been excluded. The provincial physicians responded to the call, and through the representations of a deputation from the Council of the Association to the College of Physicians, several modifications were introduced into the clauses of their proposed new Charter, so as to render that document such as, upon the whole, it was believed might prove satisfactory to that branch of the profession. Only two declarations were received from provincial surgeons respecting the results of the conference, and these did not obviously afford, numerically, sufficient grounds upon which to send a similar deputation to the College of Surgeons.

The Council of the Provincial Association having thus succeeded in satisfactorily arranging the objections with the College of Physicians, and having failed to elicit from the surgeons any documentary evidence on which to apply to the College of Surgeons, and seeing that the members of the National Institute of Medicine, Surgery, and Midwifery, professing to represent the general practitioners, were satisfied with the results of the conference, could only infer that such results were, on the whole, if not altogether satisfactory, such as the great majority of the profession would be disposed to receive. It was unnecessary, therefore, to keep up, or further protract, a discussion in the pages of the *Provincial Journal*, of a subject grown distasteful to many, from the years which had already been

consumed in agitation, when the object seemed at last to have been attained.

Nothing can be more injurious to the best interests of the entire profession, and of its members individually, than the present distracted state of our institutions. The Government and the Legislature are weary of our dissensions. They are willing, it is professed, to legislate for us, provided we can agree amongst ourselves. If the results of the late conferences, corrected and amended by the evidence which has been brought before Mr. Wakley's committee, are not to be taken as the ground-work for general legislation, we know not where it is to be looked for. A renewed agitation at this, the eleventh hour, having any other object than an amended Charter to the College of Surgeons, by which justice may be done to its excluded members, would, we much fear, lead only to the indefinite protraction of the settlement of the question, thus leaving the profession, for years to come, disunited, powerless, and as a public body, if indeed its institutions, such as they are, fall not utterly to pieces, continually exposed to public contempt.

Reviews.

Pathology of the Human Eye. By JOHN DALRYMPLE, F.R.C.S. FASCICULUS I. Folio. Plates.

The intention of the author in bringing out this work, as we are informed in the introduction, is not "to publish a *treatise* on diseases of the eye, but rather to exhibit them as they occur in nature, in a series of drawings, with such explanations as shall identify them with symptoms, and with the general treatment of the case." Considering the number and excellence of the standard works on diseases of the eye which have appeared both in this country and on the Continent, since the commencement of the present century, Mr. Dalrymple has, we think, judged rightly in throwing the results of his experience into the present form. His work thus becomes illustrative of any one or all of these systematic treatises, and indeed makes frequent reference to many of them for details of symptoms and treatment; while, through its admirable coloured drawings, it at once brings the objective symptoms prominently forwards, and characterizes and defines them in the accompanying text in such a manner as to render the work most valuable for study and consultation.

In the present fasciculus are delineated, in four plates, each containing six coloured figures, chronic conjunctivitis, and its sequelæ; tinea ciliaris; lippitudo, ectropium, trichiasis, entropium; pterygium;

symblepharon; anchyloblepharon; hordeolum; encysted tumour of the eyelids, and other morbid growths from the tarsi and conjunctiva. Of the manner in which the drawings are executed and coloured, it is scarcely possible to speak too highly; they are beautiful and characteristic representations of the diseases which they illustrate, and the entire work, if completed in the same style of excellence, cannot fail to give the highest satisfaction to those who may become possessed of it.

Proceedings of Societies.

NORWICH PATHOLOGICAL SOCIETY.

J. G. CROSSE, Esq., F.R.S., President.

The President said that he had a duty to perform which it was painful for him to undertake, and which would, probably, cast a gloom over the future proceedings of the day. He was not about to occupy their time by a long and studied address, what he had to say would be dictated by his feelings without preparation; the subject indeed was one upon which a person, even as little accustomed as himself to address a public meeting, ought to be able to express himself with sufficient effect without premeditation—he alluded to the death of their late respected Vice-President, Mr. W. Henchman Crowfoot, whose loss would not be regretted by themselves only, but also be deeply felt in the whole district, including several of the eastern counties. Mr. Crowfoot became a member of the College of Surgeons in 1801, and was also chosen a Fellow of the same College recently, when a new grade was introduced. Meeting with inadequate success in a smaller town, he removed to Beccles, where he practised (and we know how he practised,) for nearly fifty years. He was possessed of all the qualifications necessary to successful practice; his manners were easy and fascinating, his disposition kind and obliging, his head well stored with knowledge, and his industry and zeal constant. He was esteemed by the profession and the public, but he was beloved by all who had the happiness and privilege of his intimate acquaintance. The foundation of this twofold esteem they would have no difficulty in comprehending, if they knew how much he had at heart, the respectability of his profession, and the welfare of his patients. Mr. Crowfoot was not a genius; he did not all by fits and starts; he was always careful, industrious, observant, and thus he became possessed of a great fund of information which rendered his assistance acceptable, and his opinion really valuable. His kind nature, and the modesty of his own opinion, forbade him to think ill of any of his professional brethren, and in cases where the more sturdy of the profession shewed the *odium medicum*, he forbore to come to an unfavourable decision.

Gentlemen, my tale is shortly told. Mr. Crowfoot was taken ill on the 9th of November, after being present at a *post-mortem* examination of a lady who had died of low fever; on the following day he was engaged out to dinner, but was obliged to remain at home on account of increasing indisposition, and on Monday, the 13th, at

one o'clock, he was a corpse. He was in the 69th year of his age, in the possession of all his faculties, expecting perhaps to live many years, and still zealous for knowledge, being actually engaged in acquiring professional information when attacked by his fatal disease. He thought he might confidently assert that no man's death would have excited so general a feeling of sympathy and regret for his loss. The loss the Society had sustained by the death of its Vice-President, every gentleman in the room could estimate. His interest in this Society was great, he was one of the earliest to encourage its formation, and one of the most anxious of its members to promote its successful progress.

The President then referred to the literary labours of Mr. Crowfoot, and enumerated the various papers on medical subjects which had been written and published by him, and announced in conclusion that the vacant office would be filled at the next meeting.

The following specimens were exhibited:—

TUMOUR OF THE UTERUS.

Mr. Archibald Dalrymple stated that this tumour had been removed (*post mortem*) from a woman, aged 48 years. A suspicion of the disease existed 28 years ago, but more distinctly referred to the last ten. She suffered frequent hæmorrhage per vaginam, also great distress in passing the urine and feces, with deep-seated pain in the pelvis and down the legs. No examination could be made per vaginam, owing to congenital malformation. During the progress of the disease her symptoms became aggravated, and she became extremely emaciated; both lower limbs were at times anasarctous, the left one more particularly so at the time of death. Micturition could only be effected in the sitting posture, and the introduction of a catheter was very difficult. The tumour was of enormous size, and weighed twenty-one pounds. The walls of the uterus could be detected and separated from the mass of the tumour. The greater part of the tumour was solid, but in some places it was softened, and presented a different appearance. Two or three smaller tumours were developed externally, of a similar character. No microscopical examination had as yet been made of it, but it was considered to be of a malignant character.

PERFORATING ULCER OF THE STOMACH.

Mr. Firth stated that this specimen had been taken from one of the inmates in the County Lunatic Asylum, in whom peritonitis had produced death in thirty-six hours; it was unaccompanied by any sickness. The ulcer presented the usual characters. This was one of those cases, owing to the rapidity of its course, which, occurring under suspicious circumstances, after a meal, might have excited the suspicion of poisoning. Beyond a few leeches, no other depletory measures were employed.

DISEASED TRACHEA: CROUP.

Mr. Cooper, of Filby, presented a trachea diseased through croup, a plug of plastic matter occupying the tube. The patient from whom it had been taken was twelve years of age, and the disease ran its course in seven or eight days.

CEREBRAL ABSCESS, COMMUNICATING WITH THE MEATUS AUDITORIUS EXTERNUS.

Mr. R. Thompson had been requested to see a young man, aged 15, who was suffering from a large abscess, surrounding the upper and back part of the ear of the right side. There was profuse offensive discharge from the ear, which he found communicated with the abscess. The abscess was opened with relief to the patient. He died soon after. On examining the brain, slight congestion was remarked, but not to any great extent, and upon slicing it an abscess the size of a hen's egg was discovered in the middle lobe of the right hemisphere, which emptied itself into the auditory canal, passing into that passage through the petrous portion of the temporal bone. A probe could be passed without difficulty through the ear into the cerebral abscess. The left side of the brain was healthy. The father's history of the boy was that he had always had a discharge from the ear, but never complained of pain or headache; in fact, his general health was good till within a fortnight of his death, and his intellect unimpaired to the last. This case shews what destruction may be going on in so important an organ, without the intellects being affected, and without producing paralysis or coma.

Dr. Ranking read a paper on "Ulceration and Inflammation of the Os and Cervix Uteri." He commenced by referring to the importance of the study, the most favourable position for making an examination, and the choice of instruments. In the classification of the disease, he found it sufficient to acknowledge but two forms of ulcer—that accompanied by acute inflammation, and that in which the concomitant inflammation has become chronic, and has induced infiltration and induration of the surrounding parts. The mildest form of uterine ulcer is the erosion or simple removal of the epithelium; in this form the majority of non-specific ulcerations commence, though rarely seen, as it soon yields to simple measures. When an attempt at reparation ensues, granulations rise and come to the level of the mucous membrane, constituting the "granular" ulcer of authors. An exaggeration of the granular state, giving rise to exuberant but flaccid granulations, constitutes the "coxccomb" ulcer, and when the surface of this is so tender as to bleed on the slightest touch, it may be called the "fungous" or "bleeding" ulcer. The concomitant appearances in these ulcerations are different degrees of vascularity of the non-ulcerated surfaces, different degrees of engorgement and hardness of the tissues, as indicated to the touch, and discharges of various characters bathing the surface, or exuding from the interior of the cervix. In simple excoriation the os will not be materially increased in size, but will exhibit the bright red hue of recent acute inflammation, and the excoriation itself, as well as the entire upper part of the vagina, will be bathed by a thick creamy pus. The same is, doubtless, the case in the commencement of the granular form, but generally when this ulcer is met with, the acute symptoms have subsided, and the os and cervix have put on the more livid hue of chronic inflammation, the discharge becoming thinner and curdy. The long persistence of this form of ulcer, or its transformation into the "coxccomb" form, is marked by

considerable engorgement of the neighbouring tissues; the discharge is starchy and tenacious, and the pain, hardness, and cachectic state of the system, not infrequently give rise to the suspicion of cancer; and Dr. Ranking is not prepared to say that such lesions may not actually be the forerunner of cancerous degeneration. Dr. Ranking divides the symptoms into local, and general, or sympathetic; under the former may be classed pain and heat in the vagina, increased by sexual intercourse, pain in the sacral and inguinal regions increased by standing, &c., scanty or profuse and painful menstruation, persistent leucorrhœa, in many cases sterility or great tendency to abortion. The sympathetic phenomena are more numerous: external neuralgic pains, nervous headache, dyspepsia in one form or another, irritable and capricious temper, &c.

A favourable prognosis may for the most part be formed; and in the treatment of these cases absence from sexual intercourse is a *sine quâ non*, the recumbent posture is to be maintained, and the diet regulated by the health of the patient. With respect to the local treatment, Dr. Ranking follows the indications afforded by the existence or non-existence of inflammation, or engorgement of the tissues. In the simpler forms, hip-baths and emollients, followed by slight astringent vaginal injections; if there is much vascular excitement, leeches to the vulva or cervix, with injections of Decoctum Papaveris, of lead, and subsequently of a weak solution of nitrate of silver. In other cases the application of the caustic (in substance,) to the part, every four, five, or seven days, according to the severity of the case. If, however, there is considerable inflammation, engorgement, and induration, whatever be the form of ulcer, no good is to be expected of caustic until these conditions have been reduced by leeches and counter-irritation. As an adjunct to the local treatment, some medicinal alterative is required, the best is the bichloride of mercury in small doses in sarsaparilla. The absorption of the interstitial deposit will also be materially assisted by the local application of some form of iodine. In the more severe cases the alterative action of mercury is almost essential.

Foreign Department.

ON THE PANCREATIC JUICE, AND ITS INFLUENCE ON THE PROCESS OF DIGESTION.

By M. BERNARD.

(Translated for the Provincial Medical and Surgical Journal, from the Archives Générales de Médecine, Jan., 1849.)

Anatomists have long regarded the pancreas as an abdominal salivary gland, guided by the fancied analogy of the pancreatic juice with the saliva, but as I shall presently show, this comparison is not just, and is far from expressive of the real uses of the pancreatic secretion.

It is my intention to demonstrate by experiment that the pancreatic fluid is destined, par excellence, for the digestion of the neutral fatty matters contained in the food, and so fit them for absorption by the lacteal vessels.

I shall here narrate in detail the series of observations by means of which I arrived at this important and hitherto unsuspected use of the pancreas, and I shall merely state that this conclusion is the result of a long and patient study by experiments on living animals, some of which I shall briefly recapitulate.

[It is unnecessary to give the author's experiments in detail; they are some of those disgustingly cruel torturings of living dogs, for which our French neighbours are famous, and consisted in opening the abdomen, and searching for the pancreatic ducts, and obtaining the secretion by fixing a tube to them, after which the wounds were closed, and a fistula established. The unfortunate animals all recovered. The experiments related are three in number; one when digestion was commencing, one when in full progress, and the third during a state of abstinence.]

Physical and Chemical characters of the Pancreatic Fluid.—The fluid obtained in the foregoing experiments was of two kinds. 1. The *normal* pancreatic secretion obtained before any inflammation was set up. 2. *Morbid* secretion obtained after reaction had ensued.

The first kind of fluid is colourless, limpid, and viscid, and becomes frothy by agitation. It has no characteristic smell, but has a saltish taste similar to that of the serum of the blood. The reaction is invariably alkaline; exposed to heat it coagulates firmly and universally, and the same takes place with nitric, sulphuric, and muriatic acids. No precipitate is caused by dilute vegetable acids; no change is induced by alkalies, but these re-dissolve the precipitate formed by heat and acids.

From these results it would appear that the pancreatic fluid, as has already been shown by Magendie, Teidemann, and Gmelin, is of an albuminous nature, in fact the coagulated substance has every appearance of albumen, but as I shall show there is no physiological analogy between this fluid and albuminous fluid, and it is important that this should be known, as the solid matter is the active principle of the secretions. There is, however, not a complete resemblance between the pancreatic coagulum and albumen, for the former, if dried, will dissolve readily in water, the latter will not.

Morbid pancreatic juice is of a watery consistence, without viscosity, and sometimes opalescent or reddish. It is alkaline, but does not coagulate either by heat or acids.

The pancreatic juice is, without contradiction, of all the fluids of the body, the most subject to spontaneous changes. Exposed to a degree of cold, from 5° to 10° below zero, it may be kept several days, but at a temperature of 45°, the lapse of a few hours suffices to render it putrescent, and uncoagulable by heat. Its alkaline character, however, still persists. In summer this change sometimes takes place in a few minutes, for which reason there is great difficulty in obtaining it in a state for examination at that season. The deposit which occurs under the putrefactive change, contains microscopic crystals of margarine and margaric acid.

Physiological Properties of the Fluid.—I stated in the commencement of this paper that the special use of the

pancreatic fluid was to digest the neutral fatty matters of the food; this is readily shewn by mixing a portion of olive oil, butter, or suet, with the fluid, exposed to a gentle heat, when a perfectly homogeneous emulsion is the result. If this emulsion be preserved for some hours, it will be perceived that the fatty matters are not only dissolved, but are also chemically changed, in fact the neutral fatty matters and the alkaline pancreatic juices, form a whitish alkaline liquid at first, but after a few hours the mixture becomes distinctly acid, being converted into glycerine and a fatty acid. When butter is mixed with the pancreatic juice, the odour of butyric acid is distinctly recognizable.

It thus appears that the pancreatic fluid has the property of dissolving neutral fatty matters, and converting them into glycerine and fatty acid. This faculty is peculiar to the secretion in question, and is, as I have ascertained by direct experiment, not possessed either by the bile, saliva, gastric juice, serum of the blood, or cerebro-spinal fluid.

The experiments upon which the above conclusions are based, have been frequently repeated, and are so easy of execution as to be readily verified; but it is absolutely necessary to recollect the difference between *normal* and *morbid* pancreatic secretions,—the former alone possesses the properties alluded to.

Action of the Pancreatic Fluid in Digestion.—After what has been said it may be readily conceived that the action of the pancreatic fluid is determinate; in fact it may be shown by experiment that by forming an emulsion with the fatty ingredients of the food, these are placed in a condition favourable for lacteal absorption, by being converted into the homogeneous fluid known as chyle. If an animal (as a dog,) be destroyed when in full digestion of fatty substances, the fat globules will be found floating on the surfaces of the fluids in the stomach undissolved; but in the small intestine, below the point of entering of the pancreatic ducts, the fat no longer possesses its characteristics, but is converted into a uniform creamy fluid, coloured yellow by the bile. The lacteals are seen to be gorged with this fluid. I have also seen, that if the pancreatic ducts are ligatured, the fat passes through the small intestines unaltered, and the lacteals contain a limpid watery chyle, destitute of the creamy globule, which form part of the normal fluid.

Such an experiment is in itself sufficient to decide upon the functions of the pancreatic fluid, but the same fact may be shown in an elegant manner, and unaccompanied by cruelty, as I will proceed to show. It so happens that, in the rabbit the orifice of the pancreatic duct is situated some distance (35 centimetres,) below that of the ductus communis choledochus. If, then, this animal be made to eat some fatty substance, and afterwards carrots, or its usual food, and be then destroyed, the intestines will be found to contain two kinds of chyle; above the entrance of the pancreatic ducts, it is limpid and watery; below, it is creamy, as in the carnivorous animal.

If it be thus easy to demonstrate the true function of the pancreas, it may be asked how is it that this

function has not been before ascertained, and how is it that Sir Benjamin Brodie has attributed the chyli-fication of the fatty matters to the action of the bile? To solve this question it is necessary to examine the researches of Brodie, in opposition with those of Magendie, which are directly contradictory. Magendie notices the experiments of Brodie, who, after tying the ductus communis choledochus in cats, observed that the lacteals no longer contained fatty matter, but that the chyle was limpid and transparent. Magendie intending to verify this result, tied the common duct in dogs, but found that in spite of the absence of bile from the intestines, the chyli-fication of fatty matters still took place. This incongruity is explained by the fact, that in the cat the pancreatic duct anastomoses with the ductus communis choledochus before it opens into the intestine, so that in preventing the access of bile, Brodie, at the same time, cut off the supply of pancreatic juice. In dogs this anastomosis does not take place, and the flow of the pancreatic juice remaining unobstructed, the natural changes took place in the fatty matters of the food. The two sets of experiments, therefore, are not really contradictory, and both support the truth of my observations.

It has thus, I conceive, been satisfactorily demonstrated that the pancreatic fluid is destined, to the exclusion of the other intestinal fluids, to modify specially the neutral fatty ingredients of the food, and to convert them into a fluid fit for lacteal absorption. I have here examined the pancreatic fluid by itself, but it is my intention in a future essay to study its nature in conjunction with the bile, and to show that together they fulfil another part in the function of digestion. I may add, in conclusion, that these researches do not invalidate the observations of Bouchardat and Sandras, respecting the conversion of starch into glucose by the pancreatic fluid. This is one of the functions of that fluid; but it is one which it possesses in common with others, as the saliva, serum of the blood, &c., and other alkaline fluids. The emulsifying of the fatty matters is another and special property of the same fluid, which is not possessed by any other fluid in the animal economy.

General Retrospect.

ANATOMY.

NEW STRUCTURE IN THE GENITAL ORGANS.

Dr. Gordon Buck has discovered a new anatomical tissue connected with the penis, which consists in a membranous sheath investing that organ, and forming a continuation with the suspensory ligament above, and perineal fascia below. To display this structure the following dissection is requisite:—

The penis and scrotum are to be circumscribed by an incision at the distance of three fingers breadth all round, and crossing the perineum at the anterior margin of the sphincter. The dissection of the skin and cellular tissue is to be made towards the penis on the level of the fascia lata laterally, and of the perineal

fascia posteriorly, and carefully continued to the body of the penis, as far as the corona glandis. By this means the penis, as well as the suspensory ligament, is denuded of its loose investments.

An incision is then to be made along the dorsum of the penis, splitting the suspensory ligament, and extending forward to the corona, between the dorsal vessels and nerves. The adhesions along the dorsum are firm, and require careful dissection. The dissection being carried laterally, the entire corpus cavernosum is enucleated, the muscles of the perineum being raised with the sheath. It is now clearly seen that the suspensory ligament from above, and the perineal fascia from below and the sides, form one continuous membrane with the sheath, enclosing the corpus cavernosum in its cavity, and embracing the corpus spongiosum urethrae between two layers, one of which passes above, the other below it. The excavated base of the glans adheres inseparably to the outer surface of the sheath, while by means of its inner surface it caps the surface of the corpus cavernosum. The cavity formed by this sheath is limited by the triangular ligament posteriorly. That portion which covers the foremost muscles, and has been described as the superficial perineal fascia, arises laterally from the ascending rami of the ischium, and descending of the pubis as far forward as the symphysis, where the two layers meet and form the suspensory ligament; it also sends off membranous septa from its upper surface, which project between the accelerator and erector muscles, to form the triangular ligament, thus forming three independent sheaths, which are confounded anteriorly with the common sheath of the corpus cavernosum.—*Transactions of the American Medical Association.*

PRACTICAL MEDICINE.

THLASPI BURSA PASTORIS IN MENORRHAGIA.

In a case of menorrhagia which had resisted ergot, astringent injections, &c., M. Vanove employed a decoction of this common herb with complete success. The woman was exhausted to the utmost degree when this medicine was commenced. The formula used was a decoction of a handful of the fresh plant in three tea-cups of water, boiled to two; the dose was a cupful twice a-day. It appears that the herb is in common use among the German peasantry.—*Rev. Med. Chir.*, December, 1848.

SURGERY.

HOSPITAL GANGRENE.

Mr. Guthrie concludes his lecture on this subject by the following aphorisms:—

1. Hospital gangrene never occurs in insulated cases of wounds.
2. It originates only in badly ventilated hospitals, crowded with wounded men, among and around whom cleanliness has not been too well observed.
3. It is a morbid poison, remarkably contagious, and is infectious through the medium of the atmosphere applied to the wound or ulcer.
4. It is possibly infectious, acting constitutionally, and producing great derangement of the system at

large, although it has not been satisfactorily proved that the constitutional affection is capable of giving rise to local disease, such as an ulcer, but should an ulcer occur from accidental or constitutional causes, it is always influenced by it when in its concentrated form.

5. The application of the contagious matter gives rise to a similar local disease, resembling, and capable of propagating itself, and is generally followed by constitutional symptoms.

6. In crowded hospitals the constitutional symptoms have been sometimes observed to precede, and frequently to accompany, the appearance of local disease.

7. The local disease attacks the cellular membrane principally, and is regularly propagated along with it, laying bare the muscular, arterial, nervous, and other structures, which soon yield to its destructive properties.

8. The sloughing of the arteries is rarely attended by healthy inflammation, filling up their canals by fibrin, or by that gangrenous inflammation which attends on mortification from ordinary causes, and alike obliterates their cavities. The separation of the dead parts is therefore accompanied by hæmorrhage, which in large arteries is usually fatal.

9. The operation of placing a ligature on the artery at a distance, or near the seat of mischief, does not succeed, from the incision being soon attacked with disease, unless it has been arrested in the individual part first affected, and the patient has been separated from all others affected by it.

10. The local disease is to be arrested by the application of the actual or potential cautery:—an iron, heated red hot, or the mineral acids, (pure,) or a solution of arsenic or of the chloride of zinc, or other caustic which shall penetrate the sloughing parts, and destroy a thin layer of the unaffected part beneath them.

11. After the diseased parts have been destroyed by the actual or potential cautery, they cease in a great measure to be contagious, and the disease incurs less chance of being propagated to persons having open wounds or ulcerated surfaces. A number of wounded thus treated are less likely to disseminate the disease than one person in whom constitutional treatment alone has been tried.

12. The pain and constitutional symptoms occasioned by the disease, and considered as distinct from those symptoms which may be dependent on disease endemic in the country, are all relieved, and sometimes entirely removed, by the destruction of the diseased surface, which must, however, be carefully and accurately followed, to whatever distance, and into whatever parts it may extend, if the salutary effect of the remedies is to be obtained.

13. On the separation of the sloughs, the ulcerated surfaces are to be treated according to the ordinary principles of surgery. They cease to eliminate the contagious principle, and do not require specific treatment.

14. The constitutional or febrile symptoms, whenever, or at whatever time they occur, are to be treated according to the nature of the fever they are supposed to represent, and especially by emetics, purgatives, and the early abstraction of blood, if purely inflammatory,

and by less vigorous means if the fever prevailing in the country is of a different character.

15. The essential preventive remedies are separation, cleanliness, and exposure to the open air—the first steps towards that cure which cauterization will afterwards in general accomplish.—*Lancet*.

NEW TREATMENT OF CERTAIN FORMS OF BLOOD-TUMOUR.

M. Petrequin describes a particular form of sanguineous tumour, very similar in appearance, but different to common erectile tumour. It is found to be situated in the cellular tissue, not like the other in the skin, and consists of a cavity containing fluid blood, but destitute of any membrane or cyst. These tumours elevate the skin, but it does not become discoloured unless the distension is great. They are soft and fluctuating, and recognized with ease. In doubtful cases the diagnosis is rendered certain by means of an exploring needle. The more common site of this tumour is said to be the forehead. The author's treatment of this form of disease is by puncturing the tumour, withdrawing about a third part of the blood, and injecting in its stead a concentrated solution of citric acid; compression is then employed, and a cure is said to be effected in a few weeks.—*L'Union Medicale*, Oct., 1848.

TREATMENT OF HYDROCELE.

Dr. Marsh, of Albany, describes what he believes to be a prompt mode of effecting a radical cure of hydrocele. His operation consists in using a large-sized trocar and canula, through which, after evacuating the fluid, he introduces a camel's hair brush dipped in a solution of the iodide of potassium, and so brushes over the whole surface of the tunica vaginalis.

Dr. Horner, in addition to injecting the tunica vaginalis, introduces a few threads from top to bottom through the cavity, by which he considers that he ensures a more certain secretion of lymph and less of serum.—*Transactions of American Medical Association*.

SPINA BIFIDA.

Dr. Brainerd has treated this affection by injecting a grain of iodide of potass and half a grain of soda into the tumour, without evacuating the fluid in which it eventually becomes dissolved. As far as may be judged by a single case, this plan is attended by little or no danger.—*Id.*

ON THE USE OF CHLOROFORM IN SURGERY AND MIDWIFERY.

In a paper published in the *London Monthly Journal*, Dr. Snow has given a brief account of his experience respecting anæsthetic agents.

In comparing chloroform with æther, he states that either is capable of obviating the pain of the most severe operation, but that chloroform possesses certain advantages. In the reductions of dislocations and herniæ, he prefers æther.

Contrary to the opinion generally entertained, Dr. Snow does not consider its use contra-indicated in disease of the chest, unless of an active kind; neither

is it so dangerous in diseases of the heart as has been supposed. He, however, admits that in such cases it should be administered with caution.

Young subjects are most readily influenced, and immunity of pain may be accomplished without perfect coma. The greatest debility is no impediment to its use.

Dr. Snow objects to the plan of giving chloroform on a handkerchief. The stomach should not contain much food for fear of vomiting.

The greater number of patients become quietly insensible without resistance; some became excited while losing their consciousness, but by continuing the inhalation, this excitement is overcome. When voluntary motion or talking is no longer observed, it is desirable to examine the eye. If it be turned up, it is an indication of sufficient narcotism for ordinary purposes. When the margin of the eyelid can be touched without causing the orbicularis to contract, any operation will be painless. As the effect of the vapour is cumulative, Dr. Snow advises the free admission of air just previous to the production of insensibility.

The patient, after a severe operation under chloroform, is in a calmer and more cheerful state of mind than if he had suffered the pain; and after an amputation he seldom experiences nervous starting of the stump.

In midwifery, the dose of chloroform required is less than in surgical operations. If given with the handkerchief, not more than fifteen drops should be used at a time. Dr. Snow dissents from Dr. Simpson in this particular, the latter advising two or three drachms to begin with. The patient should be allowed to inhale a little at the commencement of each pain, but the insensibility need not be complete. Dr. Snow believes, that with management no retardation of the labour will occur, but, on the contrary, that it will be hastened by the relaxation of the soft parts which is produced.

OBSTETRIC MEDICINE.

USE OF ICE TO PROMOTE UTERINE CONTRACTION.

Drs. Mackale, Skinner, &c., speak highly of the power of ice to reproduce labour-pains when suspended. It is pounded and swallowed freely. Dr. Mackale says, "During two years I have had frequent opportunities of observing its effects, and in no instance have I been disappointed in its action. In cases where labour-pains had been suspended for twelve or twenty-four hours, they have been renewed promptly and efficiently. In cases of inevitable abortion, when the uterine contractions are feeble and inefficient, and hæmorrhage considerable, I regard it as invaluable."—*Transactions of American Medical Association.*

TREATMENT OF RIGIDITY OF THE OS UTERI DURING LABOUR.

Dr. Scanlon, who has carefully examined the conditions of the os and cervix, in the latter months of pregnancy, believes that the constriction, which sometimes declares itself in the first stage of labour, is due to rigidity of the upper orifice of the uterine neck, and

not the lower, which is generally sufficiently dilatable. Instead of the treatment usually recommended, viz., bleeding, antimony, belladonna, frictions, &c., he advises a continuous douche of warm water upon the os and cervix, directed by means of an appropriate instrument.—*Union Méd. and Rev. Méd. Chir.* Dec., 1848.

MEDICAL REFORM.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

The subject of Medical Reform, although one of the most important, as regards the Provincial Medical Practitioner, has not made its appearance in the columns of the *Provincial Journal* in a way that might have been reasonably expected, viewing, as we all must, its vast importance both to the profession and the public, more particularly, as it is to be presumed that the question will be finally adjusted during the present Session of Parliament. In the *Daily News* of Wednesday last, the 21st of February, is an article upon the subject, discussed in a way that carries conviction with it, the only error is that of stating that it is presumed that Mr. Wakley is on the side taken by the National Institute, which every member of the profession must know to be an error, as that gentleman has always taken an opposite view.

The article in question starts by saying that the year 1849 is to be the year of Medical Reform. It then alludes to the principles of the "Bill for Regulating the Practice of Physic and Surgery," agreed to by the Colleges of Physicians and Surgeons, and the Society of Apothecaries, and the National Institute of *General Practitioners*, which was noticed by the *Daily News*, when first issued. It goes on to say that at that time we stated our objection to these principles, as maintaining the old Colleges of Physicians and Surgeons, and constituting a new one for general practitioners, thus perpetuating distinctions in the profession, which have arisen out of purely accidental circumstances, and which, having no foundation, either in the sciences on which medicine, or its practice as an art, is founded, must exercise an injurious influence upon the medical profession, and inflict an evil upon the public. If, however, the medical men of Great Britain are willing to accept a measure of reform founded on these principles, we must leave them to themselves, and act as council for the public. We ask the members of the profession if the measures propounded in the principles will secure either to the practitioner in medicine his right position in relation to the State, or the most efficient medical aid to the public.

We have before pointed out the impossibility of drawing any legislative line between a physician, surgeon, or general practitioner, and the consequent inexpediency of legally perpetuating such distinction; our great objection to it is, that it will serve to perpetuate those jealousies and misunderstandings in the profession which have been the barrier to its own internal improvement, and to its public utility.

The members of the new College will be,—what it has ever been the policy of the Colleges of Physicians and Surgeons to make the surgeon-apothecaries,—an *inferior* class. This, we find, is denied by the National Institute; but they do not condescend to argue the point.

“The provincial practitioners must know very little indeed of the stuff of which the Fellows of the College of Physicians, and the Council of the College of Surgeons are composed, if they think that either body would consent to such an equality as that of which the Council of the National Institute seem to be fondly dreaming.”

If the provincial practitioner be not quite lost to all proper sense of justice due to the members of the healing art, and their successors, both as regards their proper position in society, and their usefulness to the public, they will be up and stirring at the present important crisis, and make a bold and determined effort ere it be too late to avert the deadly arm raised to strike the blow of destruction. Should (unfortunately,) there be so much apathy as to permit such a degradation, then, indeed, will the present generation of medical practitioners richly deserve all that may happen to them, and the curses of their children and their children's children will fall back upon them. Then we must, in order to protect ourselves from the nuisance, keep open shop, and retail lucifer matches, hair oil, quack remedies, &c., &c., as we then shall be associated with that class of persons in the same way that a person who is in company with tobacco smokers must smoke tobacco also; we then no longer can boast of our professional standing, but content ourselves to be petty shopkeepers. Surely such a state of things will never be permitted. Where is the President of the Provincial Association, one who stands high, and deservedly so, as a profound surgeon and practitioner in medicine and midwifery? Where are the surgeons of like reputation in Manchester, Liverpool, Leeds, Newcastle, York, and all the large cities and towns in England? They, I feel satisfied, have not paid proper attention to the subject; but I am sure something must occur that will fly with the rapidity of the electric telegraph through every nerve in their bodies, which will induce them to hold meetings, with a view of loading the Government with petitions to avert such a serious evil. A meeting, I believe, will shortly take place in London, for the purpose of collecting all our forces, to upset the one-sided evidence given before the Medical Registration Committee last Session, at which meeting, delegates should attend from all parts of the provinces.

Surely the large body of Members of the College of Surgeons will not quietly submit to insult upon insult, degradation upon degradation. The Council of the College of Surgeons have already heaped upon the provincial members a vast amount of insult and degradation by their recent Charter, and they now are endeavouring to double it by encouraging all in their power the inferior institution of general practitioners. They in the first place objected that *that* institution should examine in surgery, but afterwards assented, upon condition that all the candidates should undergo

an examination at the College of Surgeons, and pay the fee, but to be registered in the College of General Practitioners, thus receiving the fee and immediately casting him off; for future practitioners will have neither voice nor interest in the College of Surgeons, nor will that institution have any regard for its members, and what still further proves the fact of the inferiority of the College of General Practitioners, is the fee of £5 for a physician or pure surgeon, £2 for a general practitioner. What can be more conclusive? The inference must be, that, being an inferior grade of practitioners, a less fee is required; and it appeared also evident that the College of Physicians is determined to prevent gentlemen from obtaining that degree who have been practising generally. Look at the recent case of Dr. Crisp, one of our own body, a member of the Provincial Association, who, submitting to a most trying examination, was rejected, without any satisfactory reason being given. No doubt, had a college graduate been submitted to a fractional part of such an examination, he would have passed with great *éclat*.

I am, Sir, your obedient Servant,

GEORGE BOTTOMLEY.

Croydon, March 1st, 1849.

ANÆSTHETIC EFFECTS OF THE CHLORIDE OF OLEFIANT GAS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

As since the last notice of the effects of chloride of olefiant gas, a fair practical test has been given to the liquid, it may not be improper to shortly mention the cases. The first was a case of exceedingly rigid os uteri, in a very delicate woman, with a troublesome cough, and very cedematous legs, but with a pelvis well formed. For three hours, the pains being strong, and very little dilatation produced, twenty minims of the fluid were put upon a handkerchief, and at intervals of five minutes, ten minims were put upon it twice; in all, 40 minims. Almost *instantly* dilatation began, and in fifteen minutes the child was born. The lady was not rendered completely unconscious, (which, I believe, to be very rarely necessary, and always, if possible, to be avoided in midwifery,) but was very happy, forgot her sufferings, and began to tell that which was uppermost in her mind.

The three following cases were patients in the Leeds Infirmary, and I am indebted to the kindness of my friends, Messrs. Smith, Teale, and Hey, for the opportunity of giving it to them.

The first was a man, 55 years of age, who had had for some years so great contraction of the adductor muscles of both thighs, as almost to fix the extremities. Forty minims were given upon a cloth, not held at first very close over the face. Before becoming unconscious he muttered and moved a little. Twenty minims more were given, when he became perfectly unconscious, with relaxation of the muscles. This was kept up by

another twenty minims, which had the effect of continuing the anæsthesia. During the time forcible abduction was gradually made, with considerable improvement to the power of separating the legs. Eighty minims were given in all.

The next was a woman, aged 42, in whom a small malignant tumour was removed from the side. Forty minims were given, which at once put her into a complete condition of anæsthesia, without uttering a word, or moving at all.

The third patient was a boy, 15 years old, who, from malformation of the lower extremities, had the inner hamstring muscle of both legs divided. He had thirty minims given at first, then twenty, and afterwards ten, in all, sixty. He was not so quiet as the woman, but altogether unconscious, even when put to bed, although the operation and dressing, &c., necessarily occupied some time.

In none of these four cases was the least irritation or cough produced, and neither at the time, nor afterwards, was there any unpleasant symptom of any kind. I need not mention that a much larger quantity of chloroform would have been required to produce a similar condition, and would only further add, that I believe the little uneasiness witnessed in the man before passing into a state of complete anæsthesia, arose from the quantity of Dutch oil given not being quite sufficient, but until the exact effect of it was known, I preferred giving too little rather than too much.

I am, faithfully, yours,

THOMAS NUNNELEY.

Leeds, March 15, 1849.

THE LONDON AND PROVINCIAL MEDICAL DIRECTORY, AND MR. DAWSON'S PAMPHLET.

[At the request of some of the parties whose names are mentioned, we copy the following correspondence from the *Lancet* of March 17th.* The pamphlet is altogether beneath notice, but for the unwarrantable use made of the names of gentlemen of character. The writer is already known by the equivocal laudations of a person of the name of Teevan; his present manœuvre would seem to be to force attention to his productions by an attack on well-known members of the profession.—Ed.]

THE DAWSON PAMPHLET.

The editors of the *London and Provincial Medical Directory* present their compliments to the editor of *THE LANCET*. Their attention having been drawn to a pamphlet entitled, "The London and Provincial Medical Directory Unmasked," they wish to state that it is true Dr. Tyler Smith was one of the originators of the *Medical Directory*, in 1845, and took part in the compilation of the volume for that year; but on the

10th of April, 1845, he disposed of his share in the work, and since that time has never in the slightest degree interfered with, or been concerned in, the production of the volumes of the *Directory* for 1846, 1847, 1848, and 1849.

The omissions in the *Directory* for 1849, of which Mr. Dawson complains, arose solely from the desire of the editors to be correct. As his return was not found to correspond with the list of the College of Physicians, a letter was addressed to the registrar, inquiring into the matter. The reply of Mr. Sedgwick, the secretary to the college, is subjoined, and at once affords a vindication of the endeavour of the editors to be as correct as possible, and gives, at the same time, the *true and only reason* for the omission of the qualification adverted to by Mr. Dawson.

Beaufort-buildings, Strand, March 14, 1849.

(Copy.)

College of Physicians, Nov. 15, 1848.

Mr. Sedgwick presents his compliments to the editors of the *Medical Directory*, and in answer to their note, addressed to the registrar, begs to inform them that there is no such name either as Richard or Samuel Dawson on the College list.

There was, a few years since, a gentleman of the name of Richard Dawson, an *extra licentiate*, but his name was struck off the list.

Mr. Sedgwick thinks that the Richard and Samuel Dawson mentioned by the editors, are *one and the same person*.

To the Editor of *THE LANCET*.

Sir,—In reference to a pamphlet which has been extensively circulated, and which contains sundry scurrilous remarks, I beg to state, that so far from there being any collusion between Dr. Tyler Smith and myself, we were, in consequence of family matters, upon which it is unnecessary to enter, on unfriendly terms from the beginning of 1846 till the commencement of 1848, the time to which the statements of Dawson refer. During this period, no communication of any kind passed between us. I write this in justice to Dr. Tyler Smith and myself. It is, however, very evident that the purpose of Dawson is to recommend his pamphlet on "seminal discharges," "nocturnal pollutions," &c., and that the absurd introduction of Dr. Tyler Smith's name merely forms an excuse for Dawson's addressing himself to the respectable members of the profession.

I am, Sir, your obedient servant,

JAMES YEARSLEY.

Savile Row, March 13, 1849.

To the Editor of *THE LANCET*.

Sir,—A pamphlet has been sent to me, bearing the signature of "R. Dawson, M.D.," in which a most unwarrantable use is made of my name in connexion with that of Dr. Tyler Smith. I beg to say, emphatically, that in *no one particular* is the statement which relates to myself and Dr. Smith *true*.

I am, Sir, your obedient servant,

WM. HARVEY.

Soho Square, March 13, 1849.

* The letters are published also in the *Medical Gazette* and the *Medical Times*.

Medical Intelligence.

APPOINTMENTS.

Paris Thomas Dick, M.D., has been appointed Physician to the Bedford General Infirmary, in the room of Dr. Witt, resigned.

James Turnbull, M.D., has been elected Physician to the Liverpool Infirmary, in the room of Dr. Freckleton, resigned. Dr. Freckleton has been appointed one of the Consulting Physicians to the Institution.

John Thurnam, M.D., of the Retreat, near York, has been appointed Medical Superintendent of the Wilts Lunatic Asylum.

Nathaniel Ward, Esq., has been elected Assistant-Surgeon to the London Hospital.

ROYAL MEDICO-CHIRURGICAL SOCIETY.

The following gentlemen have been elected Officers of this Society for the ensuing Session:—President—Thomas Addison, M.D. Vice-Presidents—Henry Davies, M.D.; George Burrows, M.D., F.R.S.; George Macilwain; Samuel Solly, F.R.S. Treasurers—James Alderson, M.D., F.R.S.; Benjamin Phillips, F.R.S. Secretaries—William Baly, M.D., F.R.S.; Fred. Le Gros Clark. Librarians—John Hennen, M.D.; James Dixon. Members of Council—Robert Nairne, M.D.; William Sharpey, M.D., F.R.S.; Leonard Stewart, M.D.; Seth Thompson, M.D.; Charles J. B. Williams, M.D., F.R.S.; Sir B. C. Brodie, Bart., F.R.S.; James Bird; William Fergusson, F.R.S.; Samuel A. Lane; James Paget.

UNIVERSITY OF OXFORD.

The Degree of Bachelor of Medicine has been conferred on Charles W. Eddy, Esq., of University College, one of Dr. Radcliffe's Travelling Fellows.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates, Thursday, March 1st:—John Prowse, Somerset; Wm. Webb, Shrewsbury; Thomas Crowther, St. John's, near Halifax; Richard Skinner Heming, East Brent, Somerset; Thomas Harrison Marshall, Kingston-upon-Hull; Frederick Whitborn, Epsom; Freeman Izod, Esher.

Gentlemen admitted Licentiates, Thursday, March the 8th:—Francis Fawcett Welsh, Saffron Walden; Henry Payne Leech, Bury St. Edmunds; Frederick Oughton, Camberwell; Fred. Montgomerie Davenport Davidson, Dawlish; Wm. Henry Johnson, Weymouth.

OBITUARY.

Died, February 23rd, at Islington, aged 48, Edward Roe, Esq., Surgeon.

February 26th, in Keppel Street, Russell Square, aged 51; Leonard Stewart, M.D.

March 8th, aged 83, Robert Rainey Pennington, Esq., Senior Fellow, and one of the oldest Members of the College of Surgeons, his diploma being dated 1787. Mr. Pennington was President of the National Institute of Medicine, Surgery, and Midwifery.

March 9th, Anthony White, Esq., Member of the Council, and twice President of the Royal College of Surgeons.

March 10th, at Wavertree, in the 74th year of his age, John Latham, Esq., Surgeon.

Lately, aged 57, after a long and painful illness, Dr. Michel Fodera, professor of physiology at the University of Palermo, well known by his works on the Special Nerves, and on Absorption.

BOOKS RECEIVED.

Elements of Electro-Biology, &c. By Alfred Smee, F.R.S., Surgeon to the Bank of England, &c. London: Longman and Co.; Hall and Co. 1849. 8vo., pp. 164. Numerous wood-cuts.

The Contagion of Asiatic Cholera, &c. By Edward Oke Spooner, Esq., M.R.C.S., &c. London: Churchill. Worcester: Deighton. 1849. pp. 51.

Cases in Private Practice. By John Richard Wardle, M.D. Edin., &c. &c. pp. 56.

On the Management of the Skin, as the Means of promoting and preserving Health. By Erasmus Wilson, F.R.S. Third edition. London: Churchill. 1849. pp. 238.

Cod-Liver Oil: its Uses, Mode of Administration, &c. By John Raynes. London: Churchill. pp. 16.

Medical Missions, an Address to Students, &c. By James Miller, F.R.S.E., F.R.C.S.E., Surgeon in Ordinary for Scotland to Her Majesty the Queen, &c. Edinburgh: Sutherland and Knox. London: Simpkin Marshall and Co., and Samuel Highley. 1849. pp. 86.

Two Notices of the Obstetric Air-Tractor. By J. Y. Simpson, M.D., F.R.S.E., Professor of Midwifery in the University of Edinburgh, &c. Edinburgh: Sutherland and Knox. 1849. 8vo. pp. 7.

The "Undercliff" of the Isle of Wight; its Climate, History, and Natural Productions. By George A. Martin, M.D. London: Churchill. 1849. Post 8vo. pp. 366.

The Hunterian Oration, delivered before the Royal College of Surgeons of England, on the 14th February, 1849. By Cæsar H. Hawkins, Surgeon to St. George's Hospital. London: Churchill. 1849. 8vo. pp. 35.

The London University Calendar. 1849. Second edition. London. pp. 319.

TO CORRESPONDENTS.

Communications have been received from Mr. Humpage; Mr. Humphry; Dr. J. Davies; Mr. Leach; Mr. W. Peck; Mr. Bottomley; Mr. Nunneley.

It is requested that all letters and communications be sent to Dr. Streeten, Foregate Street, Worcester. Parcels and books for review may be addressed to the Editor of the Provincial Medical and Surgical Journal, care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

CLINICAL LECTURE ON ALBUMINURIA.

DELIVERED IN THE

LEEDS PUBLIC DISPENSARY.

By J. D. HEATON, M.D., Senior Physician to the Dispensary.

I shall select for our consideration in this lecture, some cases which have occurred in the practice of this Institution, of the disease now generally called albuminuria, serving to illustrate several important practical points in the progress and treatment of the disorder.

The first case I shall notice is that of Charlotte Carter, aged 27, who is still on our books, though on the point of being discharged. She was admitted on the 2nd of October last. A large stout woman, usually of a rather florid complexion, said to be of regular and temperate habits; she is married and has had four children. The last child was born twelve months since; it died when five months old. Since its death she menstruated once, and then became again pregnant. She thinks she is now in the fifth month of her pregnancy.

She has been out of health since about the time of the death of her last infant; she then became subject to pain in the loins, and observed that her feet began to swell. Since then the feet have always been œdematous; she has never perceived any swelling of the face. It is only about three weeks since she felt herself seriously ill; she then had much pain in the loins; the urine became very scanty, turbid, and of the colour of blood; and she began to swell much more than she had done before. She has not had medical advice before applying at the dispensary. She has had some œdema of the feet during former pregnancies; but not at all to the extent she has now; nor has the whole body been swollen. She has been visited and prescribed for by our visiting assistant for a few days before I saw her, which was on the 9th. She was then very extensively anasarcaous; the legs were very œdematous; the abdomen contained much fluid; and the breasts were remarkably distended and tense, with a glazed erythematous state of the skin, and very painful and tender. She is obliged to have the breasts supported by a sling. She is so much swelled all over as to have great difficulty in turning in bed; large folds of the skin are formed between the thigh and the groin which have become excoriated by intertrigo, and partly perhaps by the dribbling of urine, which she has

much difficulty in voiding, both from her almost inability to assume a convenient posture, and from the œdematous distension of the parts. She has occasional pain in the loins, not so severe as at the commencement of the attack. Pulse 100, small and soft; tongue quite healthy in appearance; urine abundant, pale, rather opalescent, but only depositing a cloud of mucus; specific gravity only 1005; moderately albuminous. She is in good spirits and the appetite is not very much impaired.

E lumbis detrahantur sang. viij. ope c. c. R. Ol. Crotonis, gtt. ij.; Extr. Nucis Vomicae, gr. j.; Micae Panis q. s., ut fiant pilulæ ij. Sumat j. omni mane.

R. Tincturæ Cantharidis, dr. j.; Infusi Digitalis, oz. viij. M. Sum. unciam quater quotidie.

September 11th. She has had less pain in the loins since being cupped; thinks she makes more water than she did, the urine has now a specific gravity of 1010, and is less albuminous than before; the bowels have been freely purged; pulse 88; other symptoms as before.

Omitt. pilulæ. Omni mane sumat Potassæ Bitartr. dr. ij. Cont. mistura.

12th. The breasts are much less tense but other parts appear equally distended as before. Bowels not much acted on by the Potassæ Bitartras. Makes less urine than yesterday.

Addæ Misturæ Tinctr. Scillæ, dr. ij.; Tinctr. Ferri Sesqui-Chloridi, dr. iss. Postridie mane sumat Pilulæ Croton. ut antea.

16th. There is considerable improvement since last report; she makes more urine, and the dropsical effusion is reduced in all parts of the body.

19th. Since last report, she has taken another croton-oil pill, which each time produces several watery evacuations, and gives much relief. The swelling is now much reduced. She is able to leave her bed and attend to some of her domestic employments. The urine is of average quantity, opalescent as before, specific gravity raised to 1015, and now gives only a very slight cloudiness on the addition of nitric acid.

During the following month she continued the use of the same means, taking a dose of cream of tartar each morning, to which (as it did not act much on the bowels by itself,) a small proportion of jalap was added; for which powder the croton-oil pill was substituted once or twice a week. There was still a slow gradual improvement; the dropsical effusion became limited to the feet, where her advancing pregnancy

might alone occasion it. She has occasional pain in the loins, which sometimes extends into the left ilium, but her strength and appetite improve, and she can follow her customary avocations. The mixture was changed for the following:—

R. Tinct. Ferri Sesqui-Chloridi; Acidi Nitrici Dil., utr. dr. ij.; Inf. Diosmæ, viii. oz., Sumat oz. j. quater quotidie.

But this did not agree: the urine became more scanty, there was more œdema and more pain in the loins. Adde Misturæ Tinct. Hyoscyami, dr. ij.; vice Acid. Nitric. Dil.

With this change her medicines seemed quite to agree and to operate favourably. The last two or three times that the urine has been examined it has presented no traces of albumen; and her general health is so good that she would have been discharged but for her own wish to be allowed to continue the use of the powders and mixture, which she thinks continue to be beneficial to her.

Frances Dent, admitted February 18th, a middle-sized woman, of rather dark but faded complexion, aged 42. She is married; was delivered twelve months since of a dead child, after hard labour. She has been out of health since then, though with no very definite complaint till the present attack. She has menstruated regularly since her confinement. She has had no pain in the loins, except during the menstrual periods, when she always has this; she has not observed anything remarkable about the urine. She menstruated last a fortnight since, when the discharge was excessive and continued longer than usual. Some days after this commenced she began to swell in the face, legs, and abdomen; she had a frequent desire to make water, requiring her to rise in the night several times. She had not more pain in the loins than usual, but had an unusual pain in the lower part of the abdomen.

My first visit was on the 24th, when I found the face and legs œdematous, the abdomen large and flabby, but presenting no distinct fluctuation; considerable tenderness in the loins, but no pain at present without pressure; pain in the hypogastrium; headache; drowsiness; loss of appetite; tongue large, covered with a thin moist white coat; frequent micturition; urine pale, opalescent, but without a distinct deposit, of average quantity, specific gravity, 1015, very slightly alkaline, highly albuminous; pulse rather frequent.

E Jumbis detrahantur, ope c. c. sang. oz. viij. Omni mane sumat Potassæ Bitartr., dr. ij. R. Inf. Diosmæ, O. j.; Tinct. Cantharidis, dr. j.; Sp. Æther. Nitr., dr. ij. M. Sumat oz. ij., quarta quaque hora.

28th. Swelling of the face much reduced; legs still very œdematous; urine more copious, but not materially altered in its properties; tenderness but no pain in the loins; bowels not moved. Omni mane sumat pilulum cum Extr. Elaterii., gr. l-6th, vice Potassæ Bitartr. Repetatur mistura.

March 10th. There is much improvement since last report. Each pill has produced about three liquid stools, with much sickness, but without griping. She

finds that the urine passed in twenty-four hours amounts to about three pints; it is pale and clear, specific gravity, 1015, slightly alkaline; much less albuminous than when examined before; boiling only causes a slight opacity, the addition of nitric acid much increases the coagulum. Pergat sed adde Misturæ Potassæ Acetatis, dr. iij.

14th. Not much change of symptoms, except that the urine is more abundant, the patient having passed nearly lb. vj. in twenty-four hours. Some days the face is much swelled, at other times not so. Omitt. pilula. Rep. mist. omitta Potassæ Acetate.

18th. Feels generally better; the appetite is improved; tongue natural; pulse slow and feeble; legs still œdematous; face occasionally swelled; urine very copious, still albuminous; pulse feeble and slow; appetite poor. Quater die sumat, Tinct. Ferri Sesqui-Chloridi, gt. x., in aqua. Pro re nata sumat Pil. Colocynth. Co., gr. x. Omitta Pilulum Elaterii, et Misturam Diosmæ.

24th. She is much improved since last report; she is able to rise and come down stairs; legs much less swollen, though still somewhat œdematous. Feels her general health much better; appetite much improved; tongue clean; urine about lb. iv. per diem.

After this she went into the country, where I understood that she continued better, but the œdema never left the ankles.

June 13th. She again applied at the dispensary very dropsical, and suffering from much dyspnoea and pain at the epigastrium. Urine very scanty, not above eight ounces per diem, of a low specific gravity, and highly albuminous. She was ordered purgative medicines, and a diuretic mixture, containing acetate of potash and tincture of cantharides. I saw her once afterwards, when she was somewhat relieved, but still very ill. After this I again lost sight of her till September, when she presented herself at the dispensary, professing to be quite well. She had been again out of Leeds during the interval. She certainly looked very much better; she had gained flesh, and had a more healthy complexion than I had seen before; there was no œdema about the ankles; she said the urine appeared natural; the appetite was good; she felt quite well, and wished to be discharged. Before discharging her, however, I told her to bring me some of her urine for examination, which I found clear, pale, slightly acid, of a specific gravity of 1020, but *strongly albuminous*. It was evident the disease still remained, though latent for the present, and ready to re-appear on the occurrence of any exciting cause; but as she required dismissal, I discharged her, and have seen nothing of her since.

These cases serve to give a fair representation of the ordinary symptoms and progress of a more chronic form of the disease now usually called albuminuria, from one of its most characteristic and essential symptoms. The seat of this disease is the kidneys, as is clearly proved by *post-mortem* examination of fatal cases; and one name, which is used as synonymous with albuminuria, is granular degeneration of the kidney, which refers to the peculiar appearance

presented by this organ in those who have died of this disease. The changed condition of the urine would not *alone* be a sufficient proof that the kidneys were chiefly in fault, for we have many instances of morbid states of this excretion where this is not the case. Changes in the condition of the blood must alter the character of the urine, whose materials are derived therefrom, whether these be merely temporary, as from some change of diet, or some derangement of the digestion, or general health, or whether they be of a more permanent character, as in diabetes, or lithiasis, where we have permanently morbid states of urine produced but the kidneys are not the seat of the disorder.

Albuminuria may frequently be found to commence with some exposure to cold and wet, which has the effect, when long continued, of repelling the blood from the surface, and causing it to be unduly accumulated or congested in some internal organ; any organ predisposed to a congestive or inflammatory state, whether from an habitual atony of its vessels, or from some actually pre-existing disease, being that most likely to suffer. Thus some persons are liable to have an attack of quinsy, others of catarrh, and others of diarrhœa, from a similar exposure to cold. It is as true with regard to vital as it is to physical phenomena, that the same cause, acting under the same circumstances, must produce the same effects; so that when we observe the uncertainty of the results upon the bodies of our patients of the same causes, whether these be such as tend to derange the health, or remedies intended for its restoration, it is because of variations in other circumstances of the individuals, and which certainly exist, though we may frequently be incapable of recognizing them. These other circumstances which co-operate with some exciting cause of disease to determine what shall be the exact nature of the malady which results, are called predisposing causes. Various habits and conditions of body are observed to predispose to albuminuria; habitual intemperance, especially spirit-drinking, gives a strong predisposition, deteriorating the quality of the blood, and thus impairing the nutritive function. It is frequently found also in connection with those diseases of the heart which interfere with the free transmission of the blood through that organ, thus causing congestion of the abdominal organs. Again, in the female, albuminuria has been observed frequently during the state of pregnancy, more especially in those who have been subject to a rapid succession of pregnancies, which frequently has a marked effect in lowering the health, and inducing a thin innutritious condition of the blood, which may lead to those diseases connected with imperfect nutrition, such as scrofulous affections, tubercular disease of the lungs, cirrhosis of the liver, or granular degeneration of the kidneys.

In the first case we have noticed, we find albuminuria coexisting with a pregnancy which had speedily followed a previous confinement. But the nutritive functions do not seem to have been much impaired; she was still stout and well fed, and not without colour in the cheeks; neither had she been of intemperate habits; nor did other probable cause appear beyond the

condition of pregnancy. Perhaps the disease had existed during former pregnancies; she had had during those some œdema of the feet, but this is so common in pregnancy, merely from the mechanical pressure of the uterus upon the large veins of the abdomen, that no strong presumption can be drawn from this. There can be little doubt that the kidneys had been affected from the time when pain in the loins was noticed, seven months before admission; we must regard the case, therefore, as one of a rather chronic character, slowly progressing for some months, till, under the influence of exposure to cold, or some other disturbance, the nature of which is not recorded, the symptoms assumed a more active character about the time when she came under treatment.

When the disease assumes an acute form, there is usually a good deal of inflammatory fever, and pain in the loins, the kidneys being then inflamed or much congested; and even cases decidedly chronic may present temporary exacerbations of this kind occasionally supervening. But there were no very acute symptoms in this case; and the pregnant condition is unfavourable to very active treatment. A moderate local depletion, therefore, to relieve the hyperæmia of the kidneys, was the only loss of blood that the case seemed to require or admit of. Diuretics were ordered still farther to relieve the kidneys, by increasing the flow of urine, and at the same time to promote the excretion of the natural constituents of that fluid, which prove so very injurious if suffered to accumulate in the blood. When there are symptoms of much increased vascular action in the kidneys, the more stimulating diuretics are dangerous, though in the chronic form of the disease they may be very beneficial. The great distension of the body with extravasated serum, and especially the tenseness and erythematous appearance of the breasts, required the adoption of some further means for their relief, and for this purpose none are so efficacious as those which promote a copious watery secretion from the extensive surface of the intestinal canal. The use of active purgatives in this disease requires some caution, as there is not unfrequently a tendency to diarrhœa, of an intractable character, which, when once brought about, it may be difficult to arrest. The state of pregnancy, likewise, was another reason for caution in their use in this instance. They proved, however, so harmless upon trial, and were attended with such evident relief and subsidence of the swelling, that the patient requested to be allowed to continue their use. Having tried various medicines for this purpose, I find none more convenient than croton oil, which produces copious evacuations, and with less sickness and discomfort than are caused by elaterium. Some of the neutral salines, as sulphate of potash, are likewise useful for this purpose; these should be given in rather a concentrated solution, which then determines an endosmosis of the watery part of the blood into the intestine from the blood-vessels, which, thus deprived of their natural tension, become actively absorbent of the dropsical effusion which they had before allowed to escape. But if the saline be given much diluted, or, what is in effect the same, if followed by much diluent

drink, it then enters the blood, and acts upon the kidneys. Cream of tartar is likewise useful as an hydragogue purgative of mild operation, when given in full doses, and what enters the blood acts favourably upon the kidneys.

By these means the more urgent symptoms (the pain in the loins and the dropsical distension,) were relieved; the urine also had acquired a higher specific gravity, which—as it was not diminished in quantity, and contained much less albumen,—showed that the kidneys were now more efficiently excreting the solid constituents of the urine, and that that perversion of their function which allows the escape of the albumen of the blood, was likewise under correction. As there were no febrile symptoms, it now became expedient to attempt the improvement of the general health by a more tonic plan of treatment; for this purpose, and in this disease, no medicines are equal to the preparations of iron, and of these I know none so suitable as the tincture of the muriate, which combines diuretic with its chalybeate properties. In many cases I have found most marked benefit from the use of this remedy, both to the general health of the patients, and in producing a more healthy condition of the urine, which is the best proof of actual improvement. The effect of this disease upon the blood is very marked and characteristic; besides the accumulation in the blood of urea, which should be excreted by the kidneys, and the diminished proportion of albumen in the serum, there is a very great reduction in the amount of red globules which it contains. This is evident in the pale leucophlegmatic appearance of those who have been long the subjects of albuminuria; and we know that no medicine has an effect equal to chalybeate preparations, in restoring the red globules to blood in which they are deficient.

It is a question whether this patient be now completely cured, or whether the present improvement be only temporary. The total disappearance of albumen from the urine is a very favourable circumstance; we can hardly expect all serous infiltration to leave the feet till after her delivery. When the disease has not been of very long continuance, and the structure of the kidneys is not materially altered, these organs may still remain capable of performing their function efficiently, and with due care on the part of the patient to avoid injurious influences, and to maintain a good state of the general health, a cure may be permanent; but any degree of that change of structure in the kidneys, which is the essential part of the disease, must give a strong predisposition to a recommencement of the morbid action, and a return of all the symptoms. We consider the prognosis of albuminuria occurring in the pregnant female, and not known to have existed previously, as more favourable than under other circumstances. It is an observation of M. Rayer, that albuminuria may occur in pregnant females dependent upon a temporary hyperæmia of the kidney, without permanent change of structure; but we find, likewise, that the albuminuria appearing during pregnancy, may continue afterwards, or reappear, and prove as serious a disease as in other cases. We cannot, therefore, speak at all positively of the permanence of this cure, but at

present the result is quite as favourable as we may expect to obtain in a case which may be shown to have extended over several months.

The case of Dent a good deal resembles that we have just been considering, only that the cure was not so complete and satisfactory. It was not, in this instance, accompanied with pregnancy. Most probably the disease had existed for some time before admission, though she had only noticed the symptoms for a fortnight previously. The morbid change in the kidneys often goes on for some time unsuspected, though if the urine were tested it would be found albuminous; and the dropsy is the first symptom which attracts attention. When the urine passes to a highly albuminous condition from the healthy state within a fortnight, and the body becomes anasarous, we have more acute symptoms than presented themselves in this case,—such symptoms as we shall find in the next cases that we shall consider. There is, in such a case much inflammatory fever, pain in the loins, and the urine is very scanty and high coloured. But such was not the case in this instance; I conclude, therefore, that the disease had been gradually invading for some time. This being so, the prognosis was from the first less favourable, for probably the kidneys had already undergone a considerable degree of disorganization which can never be repaired. The acute form of the disease is attended with more immediate danger to life, but there is much more probability of permanent recovery.

The treatment of this case was very similar to that of the last, and so will not require much discussion. There were less symptoms of any vascular excitement of the kidneys in this than in the former case; there was no pain in the loins, though some tenderness, which is very generally present throughout the disease; no marked symptoms of febrile action, and the urine instead of being scanty, high-coloured, and turbid with the lithates, was pale, of average quantity, and opalescent. This opalescent appearance of the urine, I may remark, is very common in chronic albuminuria, the urine not being perfectly transparent, though presenting no visible turbidity, or allowing a precipitate to subside. It is found, on microscopic examination, to be owing to an excessive quantity of the epithelial scales of the secreting tubules of the kidneys, which, in this disease, are thrown off too freely. This being the case, I see that I ventured upon a stimulating diuretic from the first, having premised a moderate local depletion; for, although the urine contained a large proportion of albumen, its specific gravity was below the average standard, showing that its proper constituents were imperfectly excreted. Hydragogue cathartics were likewise employed, as in the former case, to promote the removal of the dropsical effusion, and subsequently the same chalybeate as in the former case was employed, to improve the quality of the blood, and corroborate the general health. The subsequent history of the case shows a relapse, and again a partial recovery, but the albuminous condition of the urine still remaining is evidence that the apparent recovery is fallacious. These chronic cases may

extend over several years, with occasional amendments, followed by relapses upon any derangement of the general health. They may terminate either by the occurrence of a low form of inflammation, attacking some important organ to which the condition of the blood seems to afford much predisposition, or more gradually, with increasing dropsical distension, oppressive dyspnoea, and a soporose or comatose state, before the fatal event. The reports of this institution would furnish many cases of this kind, but I have not taken one for consideration, as the progress of such cases, till approaching dissolution, are very similar to that last mentioned.

(To be continued.)

OBSERVATIONS ON SCURVY

AS IT WAS DEVELOPED
IN BATH AND ITS NEIGHBOURHOOD, IN
THE SPRING OF 1847.*

By JOHN BARRETT, Esq., F.R.C.S.

(Read at the Quarterly Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, December 21, 1848.)

A question of very great importance is, what are the external circumstances which produce scurvy, and very different views have been held on this point. I believe the most common view, and the most correct one, is, that it is the absence of an organic acid in the food. There are some facts strongly corroborative of this opinion. In Dr. Shapter's cases there was either an entire absence, or very deficient quantity, of potatoes and vegetables, used as diet; and he says,—“From all that has now been stated, we must come to the conclusion, that the recent occurrence of scurvy in Exeter is due to this one cause,—a deficiency of food containing acid principles, and that the potato has hitherto been the means whereby these acid principles have been supplied.” He adds, in a note,—“It must not be understood from this that scurvy is stated to be solely caused by a deficiency of vegetable food; scurvy is essentially a disease of depraved nutrition, and may be produced by a too restricted and exclusive use of any kind of food. In this paper I am strictly confining myself to the nature and origin of the disease now prevailing.”—*Provincial Journal*, 1847. p. 285.

In the scurvy at the Cape, as described by Dr. Murray, the soldiers had plenty of good fresh meat, but not of fresh vegetables, and yet it occurred.

When the scurvy appeared at the Milbank Penitentiary, in the year 1840, it attacked one class of the prisoners, entirely sparing others who were longer under confinement; and it is shown that this exemption of one class of prisoners from disease “could only be attributed to their weekly diet containing five pounds

of potatoes, and an onion;” and after the potato was used generally, the scurvy entirely ceased. To those affected, “three oranges were ordered daily for each prisoner, besides nutritious food.” Dr. Baly, who gives this report, brings forward a number of instances from the reports of the inspector of prisons, showing that where the diet has been devoid of fresh vegetables, and the potato, though otherwise not deficient or bad, there the scurvy has prevailed, disappearing when the potato has been used. “At the Huntingdon Gaol, the diet which hitherto consisted of fourteen pounds of bread, ten pints of milk porridge, and four pints of soup, made of meat and vegetables, has been improved by the addition of solid meat, but no increase appears to have been made in the vegetable portion of the diet. The last report of the prison inspector mentions that scurvy still occurs.” A man and his wife were under my treatment at the same time; they were not badly off; could afford, and did have, meat every day, but potatoes and fresh vegetables, from their high price, they had denied themselves for some months. They both recovered under the use of citric acid and plenty of fresh vegetables.

No case of land scurvy appeared at the Bath United Hospital;* there the patients were never debarred the usual allowance of potatoes. At the Bath General Hospital the disease did occur. Dr. Tunstall informs me that during the scarcity of potatoes, the diet was changed; twice a week, the patients had cabbage; twice a week, rice, and peas pudding; twice a week, bread and cheese. Potatoes were entirely discontinued in the hospital for about two months, from April to June. About this time the cases occurred. The other patients in the house evinced the effects of the change of diet; had house diarrhoea, and Bath Hospital tongue; were easily effected by remedies; soon salivated; would not bear such remedies as colchicum, or iodide of potassium, and during the whole year there was an anæmic type in complaints. There was not a tendency to hæmorrhagic complaints; purpura did not appear. The class of cases to which I have already referred, in which, though there may not have been the swollen, red, and bleeding gums, there was an anæmic state, attended with muscular or lumbar pains, &c.,—were quite common. He mentions three cases of scurvy.

1st Case. A drunkard, from Bristol, came in about April, with pains in the loins and lower extremities, stains on the extremities and in the course of the tendons. This was sent as a rheumatic case. Anasarca afterwards came on, and the man died in January, 1848.

2nd Case. Admitted as rheumatic; discharged as unfit. The scurvy was discovered after his discharge, but had existed whilst in the house. This case came from the country.

3rd Case. Admitted as rheumatic; discharged as unfit. From the country.

* Continued from page 153.

* See previous note, p. 149.

These cases followed an entire deprivation of the potato before they came in, and this want was not supplied to them on coming in.

The potato, during the high price, was discontinued at the Union House, and there, as I have stated, sixty cases of scurvy occurred. Mr. Gore considers it to have been caused by the absence of potatoes and other vegetable food, except rice and bread. The supposed causes may have been in operation about three months when the morbid effects were produced; but I am bound to say that the statements of some of my informants do not bear out this view. Mr. Harries, of this city, had about six cases of land scurvy, all of them among persons whose circumstances were not very low, who had plenty of food, and were not without the potato; but whether the potato was good he could not tell. These cases were marked by spongy bleeding gums, petechiæ, vibices in the course of the tendons, and rheumatic pains. None proved fatal.

Dr. Edwards says—"Most of the diseases I treated amongst the poor were, in 1847, (especially the early part,) peculiarly anæmic in type. The same was observed here in town I learn. The cases of land scurvy I saw were confined to the poorer class. I did not meet with any among the better class of patients I was in the habit of attending. My impression at the time was, that the want of the potato specifically was neither the cause of the disease, nor of the anæmic type I observed in other diseases, but rather the almost impracticable attainment of the ordinary supply and nutritious character of food from the high price of provisions, especially vegetables, and the general want of employment which existed in the early part of 1847, and, as a consequence, physical and mental depression."

Mr. Hutchins, of Keynsham, found scurvy confined to the poor, and where there was deficiency in vegetable diet. He considers that the causes of scurvy were partly a want of ordinary diet, and partly an adynamic state of constitution, and that several months' duration of these causes produced the effects.

Mr. Perrin, of Camely, does not consider the potato failure the cause of all the mischief; but the general high price of provisions did very serious and permanent mischief, and the potato got more than its fair allowance of discredit. My brother found the cases of land scurvy in the Tisbury Union confined to the poor, and they had generally been deprived of the potato. Dr. Lindoe found the cases of land scurvy occur chiefly among the poorer classes, and he considers them to arise from a deficiency of wholesome nutritious food, owing to the privation of their usual diet—the potato. The causes may have been in operation, he thinks, three or four months, when the morbid effects were produced. He also seems to consider the crowded, ill-ventilated state of the apartments of the poor a cause of scurvy. This was my own impression, particularly in the instance I have mentioned of the man

and his wife, who were under my care. When attending them in previous illnesses I have constantly urged them to keep their apartments well aired, but without success. They seldom moved out, and had an extreme horror of catching cold. The consequence was, that their rooms were oppressive and offensive.

It is a striking circumstance, that whilst only two cases of land scurvy are reported by the Union surgeons out of the house, Mr. Gore had sixty cases in the house, and the very week that he first mentions in his report the symptoms of the disease, he also says,—“The crowded state of the sick wards naturally attracts attention; it depends mainly on the accumulation of chronic cases, and calls for additional accommodation for such cases.” And at the Bath General Hospital, where the disease did occur, the atmosphere is, probably from the vapour arising from the Bath waters which are introduced into the house, moist and unhealthy, and produces every now and then hospital diarrhœa.

It was observed to me by one of our relieving officers, that he thought one cause of the scurvy in our Union House was the alteration in the diet of the paupers on entering the house. Before entering they lived low, but were not confined to one food, and got occasionally a little gin, but in the house they had quantities of oatmeal. It may, I think, be at once allowed, that whatever tends to either mental or physical depression, will be favourable to the production of scurvy, but I question whether any cause of this description could be in itself sufficient, without the absence of a supply of organic acid in the food. There was want and illness enough last winter, and the influenza produced a peculiarly distressing effect on the general health during the winter, and indeed in its results long after it had ceased to be talked about; but though I believe there have been some cases of land scurvy this year in this neighbourhood, they have been very few. The price of the potato was high last winter, but not so high as before, and vegetables were tolerably plentiful. I should have remarked, that in the Bradford Union House it was confined to the children, and principally to those between the ages of four and twelve. The men, women, and those children who were of an age to be much in the open air, remained, with few exceptions, free from it, whilst Mr. Highmore says that not one case occurred in his practice out of the Union House; and taking fourteen consecutive cases from our Union House report, in June, I find that two of them were aged 35 and 44, whilst five were above 59, and seven below 10, years of age. Of five consecutive cases in July, one was 35, and four were above 60 years.

Those who witnessed the disease which appeared in this neighbourhood in 1847, and have referred to the account given by Dr. Shapter, of that which appeared about Exeter at the same time, will, I think, entertain

no doubt that whatever may have been the cause, they were the same; and that they answer to the disease which has been described by standard writers as sea or land scurvy. Mr. Highmore found in his cases at first almost invariably pain and heaviness in the head and weakness of the legs, many being confined to bed unable to stand before the gums became diseased. Petechial blotches, particularly on the legs, appeared in most of his severer cases, with the swollen and bleeding gums. Some of the earlier cases were ill for a very prolonged period. I observed the joints to swell, and, as I have stated, in one case to put on the usual marks of synovial inflammation. The belly became tumid. One woman applied to me to confine her, thinking she was in the family way; the citric acid cured her. Some cases terminated fatally in phthisis in a few months; and others, particularly the old, seem never to have recovered the shock, but gradually sank, though the direct symptoms may nearly entirely have disappeared. Indeed, in judging of the fatality of such a disease as land scurvy, we must not take into consideration only the cases of death, attended with its generally recognized symptoms, but must remember that where these have been overcome and the patient apparently restored to at least convalescence, other diseases have supervened, and their fatality has been determined from the shock originally given by the land scurvy. So it is in influenza: its mortality would be very inadequately estimated by the deaths occurring during its prevalence; and thus it may and does happen sometimes, that when mortality is high, the amount of prevalent disease is low, a coincidence which occurred this autumn in the district for which I am registrar and parish surgeon. In addition to the spongy bleeding gums, Mr. Perrins's cases in the advanced stage presented sloughing of the cheeks to a frightful extent. Dr. Samuel Edwards informs me that in several *post-mortem* examinations about this time, he observed extravasations of blood beneath the serous coat of the intestines and abdomen, in which such appearances were neither anticipated nor usually found. Similar to these observations is a case my friend Mr. Field has sent me an account of.

A female, pregnant with her first child, in the last month of her pregnancy, was severely afflicted with diarrhœa, and was much debilitated thereby. Labour came on but proceeded rather slowly; blood was passed per anum and she sank before delivery. On *post-mortem* examination blood was found effused under the peritoneum covering the front part of the uterus, and the corresponding portion of the abdominal parietes, in maculæ, such as are observed in purpura. The same appearances were also noted under the pleura and the pericardium covering the heart. The woman was between twenty and thirty years of age, was not an emaciated subject, and had not lived badly according to report. There was nothing wrong in the uterine cavity.

Mr. Highmore gives an interesting case of what the

sailors call bullock's liver in scurvy. He amputated the great toe just previously to the scurvy breaking out, at the centre of the metatarsal bone, in a patient aged 50. The case progressed favourably for a few days, then a fungous, livid, bleeding mass grew from the surface of the wound, becoming as large as a small orange in a month. All attempts to check its growth or set up a healing process failed. There was no altered appearance of the *gums*, but on being supplied with the lime juice, the patient lost the pain which had previously required large doses of morphia to allay it, the tumour disappeared, the part became healthy and healed.

Though the recognized cases of land scurvy may be few compared with the population, yet I think sufficient has been said to show that a scurvy diathesis did prevail during, but particularly at the beginning of, the year 1847, producing a serious effect on the general health, and giving a dangerous type to other complaints. Dr. Budd makes a remark of the deepest importance:—"Such a condition of the system,"—i.e., the scorbutic taint, "would necessarily modify the character and course of supervening acute diseases; and it is worthy of the most diligent enquiry, whether that form of scarlatina designated by the epithet *maligna*, and analogous types of other eruptive diseases, may not, in some cases, owe their peculiar aspect and character to the circumstances of a scorbutic taint already existing, when the system becomes subject to the specific poison of these several diseases." He adds in a note,—"A fact which renders this probable is, that these types prevail most during and at the close of long winters." "We may here notice the extraordinary prevalence of typhus in the severe winter of 1837-8, and the petechial character of that epidemic. Sir G. Blane has remarked, that the low spotted typhus is always most prevalent in long and severe winters. Willan states also that the malignant form of scarlatina is usually limited to the winter months." The following paragraph from Huxham's "Essay on Small-pox," may also bear on this subject:—"I have never observed either the *vegetable* or *mineral acids* of any great service in the crude crystalline pox, but I have found them highly useful in the small, black, confluent kind, with petechiæ."—*Lib. of Med.*, p. 92.

Few circumstances are more wonderful in the history of man, than the capability he has shown of bearing the severest suffering. Truthful indeed is the language of the Greek dramatist—

"Οὐκ ἔστιν οὐδὲν δεινὸν ὧδ' ἐπικλῆτος
οὐδὲ παῖθος, οὐδὲ συμφορὰ θεηλατός,
ἢς οὐκ ἂν ἀραυὶ ἀχθος ἀνθρώπου φυτῆς."

But he might have added, that not only is man capable of bearing the severest calamity, but he is even more capable of forgetting what he has borne, and of neglecting to provide against its recurrence. How pregnant is the history of land scurvy with proof of

this; though it had prevailed to such an extent, that at the end of the 16th century Sir R. Hawkins informs us that he could give an account of 10,000 mariners consumed by scurvy alone in the twenty years that he had been at sea;—that “Admiral Hosier, who set sail in the month of April 1762, with seven ships of the line, for the West Indies, buried his ships’ companies twice, and died himself of a broken heart in consequence;”—that “we are told by Dr. Lind, that during the war which terminated in 1748 in the peace of Aix la Chapelle, scurvy proved more destructive, and cut off a greater number of lives than the united efforts of the French and Spanish armies, yet it was not till 1795 that a regular supply of lemon juice was first granted to the British navy, when the mortality fell suddenly, and to a degree scarcely credible.” Between the years 1799 and 1813, the diminution of sick and of deaths in the British navy was in the proportion of four to one nearly. It was not that the means of preventing this fearful sacrifice of human life had not been long discovered, for Roussens, one of the earliest writers on scurvy, in a work published in 1564, observes, “that seamen in long voyages cure themselves of it by the use of oranges.” Sir R. Hawkins used the lemon juice in the 16th century. Lind’s “Treatise of the Scurvy,” which is still the standard work on the subject, was published in 1753, and indeed so well known was the remedy against scurvy, that Lord Heathfield, the Governor of Gibraltar, gave a family connexion of my own, Conway Heighington £500, obtained him the rank of Lieutenant in the Royal Navy, and presented him with a medal, which I have in my possession, “as a testimony of his Lordship’s high opinion of his nautical skill and bravery in getting into the relief of Gibraltar, several times during the siege, particularly on the 2nd of Feb., 1782, with a cargo of lemons for the sick of scurvy, under the heavy fire from a frigate of thirty-six guns, a zebec of eighteen, and four gunboats”—that is fifteen years before the Admiralty listened to the earnest advice of a medical man, and ordered that in future our sailors should be provided with lemon juice.

It is to be feared that we are acting in something the same manner; the potato crop has now failed three or four years, and it cannot be doubted that its failure has been one cause of the occurrence of scurvy, perhaps of other diseases, yet we have hardly attempted to find a substitute. Nay, more, it would seem from Dr. Baly’s paper, published in the *Medical Gazette*, Vol. xxxi., that though mention may not be made of its occurrence, the land scurvy is by no means unfrequent in some of our prisons, and that a diet which has been repeatedly shown to be productive of it is continued. It has been rather the fashion during the last year or two to raise an outcry against the potato. Some prophecy of Cobbett’s has

been quoted, and that which I verily believe has been the greatest friend our poor ever knew in the shape of food, is now treated with contempt, and we are bid to think of some farinaceous food in its stead, such as Indian corn. This condemnatory opinion finds support in that part of “Turner’s Chemistry,” lately published under the care of Liebig, from which I copy the following passage:—“Man being omnivorous, his mixed food contains all the constituents which are required for nutrition and respiration.” The researches of Dr. N. D. Thompson have demonstrated that the most favourable proportion between the albuminous or azotized and the saccharine or non-azotized constituents in the food of animals is, that of one part by weight of the former to seven or eight of the latter. This proportion exists naturally in the most nutritious food, such as grain, while in such food as potatoes the amount of albuminous matter is much too small. Hence potatoes alone must be regarded as very inferior in nutritive power to wheat, oats, rye, or maize, equal weights being compared.”—(“*Turner’s Chemistry*,” p. 1321.) Now, however high this authority may be, I must venture to say that my own observation some years ago, in an agricultural district, led me to believe that in reality were our poor to be confined to one kind of food, either bread or potatoes, they would prefer potatoes as the most palatable, and in the long run most nutritious, food of the two; and I do think that there is now abundance of evidence to prove that one necessary constituent of good food is an organic acid. The farinaceous seeds, as wheat, barley, oats, and rye, which are destitute of antiscorbutic property, contain no organic or vegetable acids; but “the various fruits, succulent roots and herbs, which have the property of preventing and curing scurvy, all contain, dissolved in their juices, one or more organic acids, such as the citric, tartaric, and malic acids. Sometimes these acids exist in the free state, but more generally they are combined with potash or lime, or with both these bases. Now, potatoes have been submitted to most elaborate chemical examination by Einhoff and Vauquelin, and by both these chemists they have been found to contain a vegetable acid in considerable quantity. According to Einhoff this acid is the tartaric, combined with potash and lime. According to Vauquelin it is the citric, partly in combination with those bases, and partly in the free state.”—(Dr. Baly, &c., *Medical Gazette*, Vol. xxxi., p. 703.)

In the same volume of the *Medical Gazette*, from which I extract the above, is a communication from Mr. Peppercorne, bearing testimony to “the great efficacy of sound and fresh potatoes in the prevention and cure of scorbutic disease amongst the French seamen.” They were given raw. And in a little work, “Two Years before the Mast,” which has all the appearance of being what it claims to be, an authentic narrative, there is a very interesting account of the scurvy on board an

American vessel. They fell in with a vessel which supplied them with fresh onions and potatoes, and these speedily cured them. One man, in a most deplorable condition, who could not chew the onions, had the juice of the bruised raw potatoes and onions given him. "This course soon restored his appetite and strength, and ten days after we spoke the *Solon*, so rapid was his recovery, that from lying helpless and almost hopeless in his berth, he was at the mast head furling a royal." The writer says,—“This disease is not so common now as formerly, and is attributed generally to salt provisions, want of cleanliness, the free use of grease and fat, (which is the reason of its prevalence among whalemén,) and, last of all, to laziness. It was probably from our having none but salt provisions, and from our having run very rapidly into hot weather, after having been so long in the extremest cold.” He says that medicines would have been of no use,—their's were exhausted,—“for nothing but fresh provisions, and *terra firma*, has any effect upon the scurvy.” How striking a proof is this of the amount of ignorance still prevailing on this subject, even amongst those most interested in being acquainted with it as most subject to its evils; and it shows that the neglect of merchants to provide their ships' crews with the preventive of scurvy, is not peculiar to this country where Dr. Budd has animadverted on it, but extends to America, and would really seem to arise, in some measure, incredible as it may appear, from ignorance of it.

But may not the potato derive its great value partly from another circumstance? I have long considered it a stimulating food, and that it derived its value in a great measure from this. Now, it belongs to the same natural order as the capsicum; and if the doctrine of homomorphism be true, “that plants, having similar structures, have similar properties likewise.”—*Burnett's Botany*, p. 985.) May it not possess some of the stimulating properties of the capsicum? “It is a fact,” says De Candolle, “which should never be lost sight of, that all our aliments contain a small proportion of an exciting principle, which, should it occur in a greater quantity, might become injurious, but which is necessary as a natural condiment; and that, when this stimulating principle is naturally in very small proportion, we increase it by art, or supply its place by the addition of spice”—*Burnett's Botany*.

There is a way in which the potato is used which may not have been thought of, but which I think may have much to do in preserving public health,—I mean mixed with wheaten flour in bread; I believe very few bakers omit to use it, and perhaps we may have acted unwisely in condemning this adulteration. One of the questions I put to my correspondents was, “Do you consider that the potato, as an article of diet, may be safely dispensed with?—or can you suggest any sufficient substitute? Do you consider that rice would be?” Mr. Gore says, that the impression left on his

mind was, that vegetable food is indispensable to health, and that the potato is one of the best or most convenient forms. The inmates of the Union House soon absolutely loathed rice. And his observations on these circumstances strongly confirmed a previous opinion, that rice is a very poor and inadequate article of diet. Mr. Lloyd says, that potatoes *cannot* be safely dispensed with, there is no good substitute for them; rice is a bad substitute, and produces disease of the mucous membrane of the bowels. Dr. Tunstall looks on bread and cheese as the best substitute for potatoes. Dr. Lindoe thinks that in warm climates rice might be found a useful substitute for the potato, but in England he is not aware of any vegetable that could supply its place. Mr. Hutchins does not consider that rice would be a safe substitute for the potato; thinks bread would suit the English constitution; finds peas, and grits, and salted meats, readily induce obstinate skin-disease; and carrots and parsnips do not well agree as a work-house diet without some bread. Rice, with broth or soup, and a small quantity of bread, he finds makes a very wholesome and palatable meal. Rice, even with treacle, is seldom liked; suet pudding, or bread and cheese, is always preferred. Mr. Perrin considers parsnips nearly as good as potatoes, though not near so palatable; rice will never be used, from the strong aversion the poor have to it. My brother believes that potatoes may be dispensed with, provided in their place we use some fresh succulent vegetables, as turnips, carrots, celery, cabbage, &c. In the Tisbury Union House, when the potatoes were becoming scarce, and the diet table was altered, he requested that turnips, carrots, or greens, might be given twice a-week, and potatoes once, and not a single symptom of land scurvy occurred to any inmate. He also found that those in his district who had the first symptoms of the disease, were speedily relieved from them by a vegetable diet. Rice he believes to be useless as a preventive of land scurvy, because in the Crediton Union, where it was an article of diet, several cases of land scurvy occurred. The same weight of boiled rice had been substituted for potatoes in that Union House. Mr. Shorland considers it most unadvisable that the potato should constitute, as heretofore, the general diet of the lower orders, but as an adjunct considers it preferable to rice.

(To be continued.)

CASE OF PESSARY IMPACTED WITHIN THE VAGINA FOR TWO YEARS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Conceiving the following case of impacted oval box-wood pessary within the vagina for the space of two years, with the singular and simple method employed

for its removal, after every other means had been resorted to, possesses a peculiar claim for publication, I will briefly give you the particulars in order that you may allow it a space in your Journal, should you, upon perusal, think it merits one.

Mrs. W., aged 60, married, but without children, about two years ago consulted a practising empiric, with symptoms of general debility and tenesmus during urination, for which he advised the use of a pessary, and prevailed upon her to allow him to introduce one, which he did with some difficulty. Her existing symptoms became subsequently much aggravated, with additional weight, heat, pain and uneasiness about the loins and vagina, with a constant dribbling away of urine. She applied again to her adviser and requested him to remove the pessary. He tried to do so by adopting different expedients, but after fruitless efforts for the space of two hours, he gave up the task and coolly assured her, she need be under no apprehension, as the pessary in a short time would rot away, without the slightest injury to her. She still consoled herself with the belief that time would remove what her adviser could not. However, her general health became more alarming, and among other practitioners, she consulted my brother, Mr. R. H. Leach, of Cowlshaw, near Oldham, who carefully examined the vagina, and found a pessary so firmly wedged therein that he could not remove it with his fingers. The other medical gentlemen whom she had consulted prior to my brother, had likewise failed to relieve her of it.

On the 1st of September, I went with my brother armed with every little invention calculated to dislodge such a foreign body from the vagina, and found the case exactly as he had described it; the woman had a care-worn countenance, was dejected in spirits, cough, disordered digestion, incontinence of urine, much emaciation of body and general debility. The sphincter ani was paralysed, most probably from long continued pressure of a large foreign body upon the muscular nerve supplying it with motion. The mucous folds of the rectum were relaxed and much congested. The pessary could be distinctly felt through the rectum in the vagina. The perineum was rigid, and though I could move the pessary within the vagina, the rigid perineum prevented an extraction. The lower orifice of the vagina was very small. The woman was now placed upon her left side and her shoulders slightly elevated; the vagina was well lubricated with lard. Two fingers of the left hand were passed into the rectum behind the pessary and traction thereby made, whilst the index finger of the right hand, which was with difficulty passed within the vagina behind the pessary, acted as a second traction. In this way the pessary could be brought to the lower part of the vagina, but the small outer orifice and rigid perineum would not allow its broad diameter to pass. Scoops, a small vectis, and various other means were then tried without success. Perforation or crushing were now the only expedients, and being distant some miles from town, we thought it probable that the best perforator would be the joiner's gimlet; and as the pessary was hollow and made of box wood, perforating with a gimlet

would most probably fracture the sphere of the pessary into different segments, which would then be readily removed by a forceps. My brother now brought the pessary as low as he could in the vagina by using traction with two fingers, introduced behind the pessary within the rectum, and steadily held it fixed against the perineum and outer orifices of the vagina with his right hand, protecting the soft parts by means of a towel, whilst I perforated the pessary with a gimlet. On the groove of the gimlet, behind the worm, passing within the hollow of the pessary, its walls fractured into three segments, the parts of which were now readily brought away with a forceps, and the operation completed.

We found that granulations had formed on the cervix uteri, which had passed within the opening usually left for a pessary tape, and were torn away with the extraction and found within the hollow of the pessary after extraction. The woman has since done very well and nearly recovered her wonted strength and spirits.

Such cases as the one I have described are rarely met with in practice. I have only heard of two, one was in the practice of Mr. Jesse, of Frodsham, who is a practical and very intelligent surgeon, and the other case was in Liverpool. I am not aware the gimlet has been tried before in such a case, but as it effectually answered my purpose, after more complicated instruments had failed, I can with confidence recommend it to the profession, as an instrument always near at hand, and calculated to realize the best wishes of the operator in such a case. Should you deem the case worthy a space in your practical Journal, you will much oblige,

Sir, your obedient servant,

JESSE LEACH.

Heywood, Lancashire,

March 10, 1849.

CASE OF PLACENTA PRÆVIA.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

If your valuable Journal has not already been inundated to too great an extent with cases of placenta prævia, I beg to submit to the notice of your readers the following case, which occurred in my practice, and was attended by my friend Mr. William Peck, of Bedford.

The case appears to me to be confirmatory of the plan first practised by Mr. Kinder Wood, of Manchester, and since, so prominently brought before the notice of the profession by the writings of Dr. Radford, of Manchester, and Professor Simpson, of Edinburgh. If you think the case worthy of insertion, I forward it to you as concisely sketched by Mr. Peck himself.

I am, Sir, your obedient servant,

T. HERBERT BARKER, M.D.

Bedford, March 14, 1849.

CASE.—On the 8th instant, I was summoned to Mrs. Rust, of Wilden, near Bedford, in labour for the third time. I found her of leucophlegmatic temperament, and naturally delicate. There had been so much hæmorrhage that the woman was nearly exhausted. On examination, I detected a globular, softish, spongy mass, immediately over the os uteri, which was flabby, and sufficiently dilated to introduce four fingers. A pain came on, and with it, a fearful gush of hæmorrhage. I was now certain that it was a case of placenta presentation. Perceiving that the woman was getting weaker, I determined immediately to remove the placenta, directing the administration of some brandy and water, and a full dose of ergot. I then introduced my hand, carefully peeling the placenta from its attachment to the uterus, removed it, divided the funis, and immediately the hæmorrhage ceased. Uterine action not coming on for some time, I repeated the secale, occasionally passing my finger around the inner surface of the os uteri, and shortly I had the pleasure of perceiving my patient rally. In about four hours from the time the placenta was removed, the fœtus was naturally expelled. The woman is doing very well. Success in these cases, in my opinion, depends upon prompt interference.

WILLIAM PECK, 14, Priory Terrace, Bedford.

P.S.—I have pursued this plan in two other cases, with the same advantage to the mothers as in the above case, and in one of the cases the child was saved; but I regret that records of the particulars were not preserved.

ON THE ADMINISTRATION OF CAMPHOR IN CHLOROFORM.

By WILLIAM DAVIES, M.D., Senior Physician to the Bath United Hospital.

In common, no doubt, with many other medical men, I have often felt it to be a matter of much regret that we do not possess a convenient mode of administering camphor in full doses. From the statement of the Messrs. Smith, of Edinburgh, and also from the comment made thereon in a late number of the Journal, I was led to suppose that the difficulty alluded to had no longer any existence, in consequence of the solubility of camphor in chloroform, and its non-precipitation on the addition of water or other ordinary vehicle. I am sorry to say, however, that the result has been by no means satisfactory. I ordered a solution to be made in the proportion of a scruple of camphor to a drachm of chloroform. The solution was perfect, and the camphor was not liberated on the addition of water; but immediately on being dropped into water, it sank to the bottom in the form of a globule, and though, by means of brisk agitation, it became diffused through the water, yet it rapidly re-accumulated at the bottom of the vessel, nor could this result be avoided except by adding so much mucilage as to render the draught unpleasantly thick. Nor is this the only difficulty, as in pouring the mixture

from the bottle into a glass, some of the camphor becomes deposited on the sides of the bottle, and also attaches itself to the glass out of which the draught has been taken, so that the patient does not get the prescribed quantity of camphor.

If any reader of this Journal knows how the difficulties here mentioned are to be overcome, he will do good service by communicating the fact in its pages.

CLINICAL ILLUSTRATIONS.

ON CORRODING ULCER OF THE UTERUS: CASE AND REMARKS.*

By EDWARD BALLARD, M.D., of Leamington, Late Senior Physician to the St. Pancras Royal General Dispensary, and Medical Tutor in University College, London.

REMARKS.

Nature of the Affection of the Uterus.—The great question with respect to *corroding ulcer of the uterus* is, whether or not it is connected with cancerous disease? That the ulcer is very obstinate in its character, very indisposed to heal, and presents a tendency to deep destruction of tissue, are points which all are agreed upon; and the fact that these characteristics are equally possessed by the ulcer from cancerous disorganization, has led to the suspicion that corroding ulcer is but one form of malignant disease. The partisans of this opinion overcome the difficulty arising from the absence of tumour, by the assumption that all trace of cancerous deposit is removed by ulceration as fast as it occurs, the removal proceeding *pari passu* with the deposition. On the other hand, it has been maintained, that analogy furnishes us in lupus, and other diseases, with examples of deeply spreading ulcers, altogether distinct from cancerous disease, and that unless distinct proof can be adduced of the presence of cancerous tissue, we must not argue respecting it from the character and position of the ulceration alone. It may be, that the case which I have recorded, will assist in throwing a little additional light upon this disputed point of pathology. I would place together four points as worthy of notice, with a view to its elucidation. First, that there was present, in my case, a considerable amount of ordinary *inflammation*. This was obvious after death, from the colour of the parts of the uterus adjacent to the ulceration, of the ecchymoses scattered though the congested portion, and from the condition of the parts of the bladder and vagina adjacent to it. Secondly, that some kind of *foreign deposit was present* near the surface of the uterine ulcer, and infiltrating the tissue which formed the base of the bladder, pressing upon the termination of the ureters, and causing their distension with the urine. Thirdly, that in this tissue were discovered, by the aid of the microscope, *cells similar to those which are met with in cancerous growths*.

* Continued from page 158.

Fourthly, that, as in Dr. Heaton's case, the *nutrition had been depraved*, from privation.

Now, I am not one by any means given to the "anticipation of nature," or disposed to generalize from individual instances, nor (to proceed still further,) am I especially anxious to insist here, or in any other case, on the discovery of "cancer-cells," as proof positive of the presence of cancer. I am not by any means so certain that what I should recognize as a cancer-cell would be equally admitted to be such by another person, or, in other words, that the cell is so peculiar, that it can belong to no other kind of growth; and hence, although I am inclined to think that the present case tends in some degree to support the view of those who hold the cancerous nature of the corroding ulcer, I am far, from believing that it was *certainly* of cancerous origin, and far less from holding the opinion that it is always so. The first and fourth of the facts to which I have above alluded deserve to be well considered; whether originally cancerous or not, had not ordinary inflammation much to do with the ulcer? Might not the ulceration have been due to this in great measure, as engrafted on, or independently of, the malignant deposit? And, lastly, had not the defective nutrition considerable influence in both Dr. Heaton's case and my own, in determining ulcerative absorption as the result of this inflammation? I believe these to have been important agencies at work in the production of the disease.

The *ulcerations and vesicular elevations on the mucous membrane of the gullet* are the only other morbid appearances to which I shall occupy the space of the Journal in alluding. In Dr. Heaton's case, ulcers, small and superficial, were found in the stomach. The œsophageal ulcerations I do not recollect having seen noticed to be preceded, as in this instance, by a vesicular sort of eruption on the membrane.

Period of Life.—In both Dr. Heaton's case and my own the patient had passed what is understood as the middle age. Dr. Heaton's patient had, we must believe, long ceased to menstruate; my patient, however, was still subject to her periodical flow, nor did it cease to appear when the more obvious symptoms of the uterine disease became manifest. The catamenia appeared in the month of August, but in that of September she was unable to distinguish between this natural discharge and the morbid one.

Outbreak of the Uterine Disease.—In Dr. Heaton's case no period is distinctly stated as that at which the uterine affection commenced. The patient is merely said to have been out of health for three or four years. Such, too, was the case in some degree with my patient. Although not ill enough for her ailments to attract much of her attention, or to prevent her following her customary avocations, or even to be an obstacle to active exercise, she had plainly been falling off in her health for some time, some symptoms of uterine disease, with hæmorrhoidal discharge, having from time to time presented themselves. Her husband also assured me after her death, that she had been subject to passing blood with her urine for some months before she suffered any pain. The more obvious symptoms of her complaint however, and what most persons

would have designated as its commencement, were attributed by herself to over exertion. Much serious disease may be advancing in the frame with but little token being afforded, and hence little suspicion being aroused of its existence, when all at once subsequent to, and no doubt under the superadded influence of, some otherwise trifling occurrence, the system gives way, the latent affection bursts into light, and runs a rapid course to a fatal termination. Clinical observers know this well.

The precise *duration* of the disease of the uterus is difficult to determine. Probably it had existed in a latent form for some months prior to its manifest outbreak, possibly for two or three years, or as long as the patient had been subject to vaginal discharges. If so, there will be in its chronic progress a similarity to Dr. Heaton's case.

Symptoms.—The symptoms of the uterine disease were very distinct in the two cases. In Dr. Heaton's, the repeated floodings led to the suspicion of uterine ulceration, but the pain and hypogastric tenderness were trifling in amount. In that which I have reported there had been no flooding whatever, the uterus having only previously displayed disorder of its function in the several miscarriages which had taken place. The pain in the loins, sacrum, thighs, and groins, due, no doubt, in great measure, to the renal affection, constituted here the most remarkable symptom, and was especially induced by the passage of feces through the rectum; a point of interest too, connected with this pain was its plainly *rheumatic character*. By a superficial observer, it would have been no difficult matter to have overlooked completely the disease in the womb. The patient, a weakly woman, was exposed to cold and wet. Some days after, in consequence, perhaps, of over walking, she was attacked with pain in the loins and thighs, (the vomiting might have arisen from the ale she had taken having disagreed with her.) The pains continued for some weeks, increased by warmth, aggravated by motion, always worse at night, relieved by moderate exercise, and always more complained of when a change took place in the weather. Until the futility of anti-rheumatic remedies had been discovered, no enquiry might have been instituted into the condition of the uterine and urinary system, and many women are slow in mentioning them spontaneously. Such an error was very possible in the hurry of dispensary practice, and, perhaps, under such circumstances, might not have been quite unpardonable. The masked character of the symptoms in this case only impresses upon the practitioner more strenuously than ever, the great importance of the practical rule of enquiring, whatever the apparent disease, into the condition of every organ of the body. The *discharge* from the vagina was, on every occasion that I had an opportunity of examining it, tinged with the colouring matter of the blood; still the patient described it as "like water," and so did Dr. Heaton's. The patient's description of a vaginal discharge, I have found, is never to be relied on. "Thick" and "watery" are the only terms employed to designate its character, and the practitioner is pretty sure to be led away if he depends on anything

but his own eye-sight in satisfying himself on a point like this. *Vomiting*, with *constipated bowels*, and *indurated faces*, were remarkably present in both cases.

Before passing to the observations I have to make on the diagnosis of the disease, I wish to offer a few remarks on the *vaginal examination*, and this more by way of caution than anything else. I suppose that no one in the present day would proceed to treat a case of severe, or even apparently trifling, uterine disease, without physical evidence, if he could obtain it, both to the finger, and, by the aid of the speculum, to the eye, of the actual condition of the organ. Some women are so foolish as obstinately to refuse the practitioner this means of investigation, but when its importance is properly represented, and its necessity firmly insisted on, I have rarely failed to obtain it. But what I wish to refer to is, the fact noticed in the report of the *post-mortem* examination, that on passing the finger into the vagina, so as to feel the ulcer of the cervix; it passed through the thin membrane left by the ulceration, and entered the cavity of the peritoneum. I need not say much here respecting the extent of the ulceration in this form of disease; enough is reported upon that head, and scarcely requires repetition. But the necessity of great caution under these circumstances in making vaginal examinations, cannot be repeated too often. The accident which occurred after death might have taken place during life. Corroding ulcer of the cervix uteri is not so far from the peritoneum, especially when it begins to attack the body of the organ, but that a trifling pressure of the finger, or a little rudeness in the mode of examination, may be fatal to the patient. A distinguished professor once informed me that he feared that in a case of corroding ulcer, he had once himself, unavoidably, hastened in this way the fatal result. A further caution may be given with respect to the kind of speculum to be employed. In many cases of uterine disease there is an advantage, in my opinion, in the use (at a first examination,) of a cylindrical speculum, avoiding those which act by dilatation, until it has been ascertained that the dilatation can be productive of no injury. In corroding ulcer of the uterus especially this precaution is of value, as the same accident may happen as from digital examination.

Diagnosis.—I did not recognise this case during life as one of corroding ulcer; but as one of ulcerated cancer of the cervix uteri; nor, as I said above, am I certain that the diagnosis was incorrect. The absence of lancinating pain might be readily accounted for by the absence of the indurated tumour, which is known to be its cause. When the patient first presented herself for treatment, I was struck with her remarkable sallowness and pallidity, and in the lack of any hæmorrhage to account for it, I was led to institute an enquiry into the condition of the uterine system. The existence of the vaginal discharge, of an extensive excavation of the cervix uteri, with a hardened and irregular edge, taken in conjunction with the sallowness and pallidity to be accounted for in no other way, led me to conclude that, although no obvious tumour was discoverable, I had to treat an ulcerated cancer of the

cervix uteri. The occurrence in the progress of the case of large cells, like those of cancer, in the urine, and at length of the cancerous odour in the vaginal discharges and in the urine, with increasing weakness and emaciation, confirmed the opinion which I had formed of its nature.

I have studiously confined the foregoing observations to the principal disease, and would only further remark, in respect to its complication, that during the latter days of the patient's life, the pains which had marked the uterine affection were scarcely complained of at all, being obscured by the overwhelming torture arising from the vaginal ulceration and the vesico-vaginal communication, every gush of urine or discharge eliciting the most distressing cries.

The treatment under the view I took of the case, could only be directed to palliation, and an endeavour to support the system, and improve the digestive functions. With this view gentian and sulphate of bebeerine were administered to her when she first came under treatment, and suppositories of opium and soap, and afterwards of belladonna, were employed, till the condition of the bowels forbade their further use. In the latter periods of the complaint, local pains were sought to be relieved by the application once or twice of a few leeches, by turpentine fomentations to the abdomen, warm water fomentations to the vulva, muriate of morphia, &c.

Leamington, February 11, 1849.

PROVINCIAL
Medical & Surgical Journal.

WEDNESDAY, APRIL 4, 1849.

We have on former occasions contended for the right of medical men to remuneration on giving information to Life-Assurance Offices, by which the assurance of lives may be more safely and advantageously effected. While admitting this right, the offices have very generally urged that the party insuring his life should pay the fee to his own medical man, the offices on their part being responsible to their own referees. This may have an equitable appearance in theory, but is not found equally feasible in practice. The insurer very commonly objects to the paying of this fee to his own medical adviser, and expects that the necessary questions will be at once answered by him as are those by the non-professional friend to whom reference is also made; while, on the other hand, the information required from the medical attendant may be, and often is, of that character which, while it is of essential importance to the office to know, at the same time proves to the disadvantage of

the party insuring, and consequently places the medical man in an unpleasant position with his former patient.

It is unnecessary to go through the arguments which have been so often brought forward on this question. However just the claim of the medical man, it has been hitherto disregarded, and he has been exposed to various injurious consequences, as he may have acted conscientiously towards the office on the one hand, or refused to give the required information on the other.

Through the exertions which have been made by the medical press, and by certain Associations of medical men, and in particular by the Manchester Medico-Ethical Association, some of the offices have at length been brought to see the question in a more equitable light, and looking to the influence which medical men cannot but have with their patients, we are inclined to hope that the final adjustment of the matter now remains in their own hands. Whenever a difficulty occurs in future respecting the payment of the fee to the medical attendant, it is easy to inform the party proposing to insure, that, although one office may raise an objection on this point, there are others of equal respectability which will be ready to effect the assurance, on terms equitable to all parties.

Several Life Assurance Offices have now adopted the principle of remunerating medical men for their reports, and we believe that we cannot do better towards carrying out this principle than by here subjoining a list of them:—

Britannia, 1, Princess Street, Bank, London.

Professional, 76, Cheapside.

British Mutual, 17, New Bridge Street, Blackfriars. Yorkshire, York.

Church of England, Lothbury.

National Mercantile, Poultry, Mansion House.

Solicitors' and General, 57, Chancery Lane.

Westminster and General, 27, King Street, Covent Garden.

General Benefit, 4, Farringdon Street.

English Widow's Fund, 67, Fleet Street.

Legal and Commercial, 73, Cheapside.

Medical, Invalid, and General, 25, Pall Mall.

Engineers, Masonic, and Universal, 346, Strand.

Star, 44, Moorgate Street.

London Indisputable, 31, Lombard Street.

Royal Farmers' and General Prudential, 346, Strand.

Prudential Mutual Assurance 14, Chatham Place, New Bridge Street, Blackfriars.

Review.

Practical Observations on certain Diseases of the Chest, and on the Principles of Auscultation. By PEYTON BLAKISTON, M.D., F.R.S., Fellow of the Royal College of Physicians, &c. &c. London. 1848. 8vo, pp. 368.

The author of this very useful and practical work has long been favourably known to the profession by his researches upon some forms of valvular disease of the heart. His object in the present treatise is to bring together the results of his experience in hospital and private practice upon several other important affections of the heart and chest. A brief introduction to the principles and practice of auscultation is prefixed, together with a series of short propositions, illustrated with appropriate explanations and diagrams on the physical properties of sound. This work does not profess to be a systematic one, but contains much valuable information on the diseases of which it treats. The principal of these are—thoracic aneurism; chronic heart-disease generally; pleurisy; pneumonia; and phthisis pulmonalis. The greater, and in our opinion the most valuable, portion is that devoted to the consideration of diseases of the heart, many of the cases of which are of great interest; these, however, it is obvious, we are precluded by our limited space from referring at any length; we prefer, therefore, extracting some general remarks on the treatment, which, with certain modification, will, we believe, be found applicable to most heart affections.

"A certain number of cases of valvular disease, hypertrophy, and dilatation, with attenuation," observes Dr. Blakiston, "result from inflammatory attacks. Some of these, as acute pericarditis, are well marked, and therefore are generally recognised. If such cases were treated on the plan detailed in the chapter on pleuritis, with mercurial frictions and leeching, rather than by copious venesection, I cannot but think that the consequences would be in general less serious than they usually are, that the heart would less frequently adhere to the pericardium, and that hypertrophy, dilatation, and valvular disease would be less common." And again—"Dr. Hope has pointed out the injurious tendency of such extensive venesection, from its inducing a state of anæmia with its concomitant evils. But if the views in the tenth chapter of this work are correct, there is another very powerful reason against this treatment; for, in proportion as the power of the muscular walls is diminished by it, so is the tendency to dilatation and tricuspid regurgitation increased, whereby congestion of the general venous circulation is produced. With these dangers before us, it is impossible to carry the system of depletion to any great extent. We must be content to relieve the tension of the vessels, when it seems considerable, by small bleedings, or by the application of cupping-glasses and leeches to the precordial region. This plan will often succeed more effectually in quieting the action of

the heart than more copious blood-letting, which is often followed by strong reaction. At the same time sedatives and rest materially assist; in fact, it is seldom necessary to abstract blood at all, if the patient be kept free from mental or bodily disturbance."

"If, now, the action of the heart be enfeebled, it matters not whether this arise from attenuation or from a fatty and flabby state of the walls of the ventricles; in either case a tonic and sedative treatment is clearly indicated. This will in most cases be best carried out by a generous diet, combined with mental repose, and such an amount of exercise as shall invigorate the system without inducing fatigue or hurrying the circulation. The sesquichloride of iron, with hyoscyamus, is a valuable remedy in such cases."

Dr. Blakiston carefully points out the variations in the treatment to be made according to the varying nature of the organic change, state of the circulation, &c.; but the general principle of treatment applicable to very many forms of chronic heart disease is as we have stated, and none will be found more effective than a carefully regulated diet, together with the exhibition of iron, in combination with sedatives, as pointed out by Dr. Richard Chambers, (late of Colchester, now of London,) in this Journal.

Though not connected in any way with the preceding subject, it may interest our readers to hear that Dr. Blakiston has witnessed "very beneficial results" from the use of the cod-liver oil in pulmonary phthisis. The recent valuable paper on the use of this medicine in consumption, by Dr. Charles J. B. Williams, published in the first number of the *London Journal of Medicine*, January, 1849, ought to be consulted by every medical practitioner, as we cannot but think, if similar results are found to follow the employment of the oil in the hands of others as have been observed by Dr. Williams, it will prove a most valuable means in the treatment of this devastating disease. To give a fair trial, however, of the remedy, Dr. Williams's directions as to its mode of exhibition and the other parts of the treatment should, in the first instance at least, be implicitly followed.

Proceedings of Societies.

BIRMINGHAM PATHOLOGICAL SOCIETY.

October 5th, 1848.

Dr. FLETCHER in the Chair.

HÆMOPTYSIS SUDDENLY FATAL; ITS SOURCE NOT DISCOVERED.

Dr. Mackay related the following case:—

A married woman, aged 28, delicate looking, and of spare figure; while suffering from cough and slight pain in the chest was suddenly seized with hæmoptysis, which, from the quantity and rapidity of the discharge alarmed her much. The violence of the attack continued for about an hour, during which she expectorated fully half a pint. The usual remedies, including

venesection, were resorted to. For a few days the expectoration was tinged with blood, but her condition appeared to promise a gradual recovery, when ten days from the first attack and while quietly lying in bed, another attack of hæmoptysis came on, and she expired in two or three minutes, apparently from suffocation, after bringing up a considerable quantity of blood, which was discharged from the nose as well as from the mouth.

The chest and abdomen were examined. In the former the apex of the left lung adhered to the costal pleura over a space as large as a shilling, and corresponding to this a cavity, large enough to hold a pigeon's egg, was detected on incising the lung. The cavity was empty, and neither around it nor elsewhere was any tubercular matter found. The lower lobes of both lungs were gorged with blood, but nothing like apoplectic spots could be seen. Stomach full of blood; abdominal organs healthy.

Mr. Alfred Baker presented a fine specimen of osteo-sarcoma of the left tibia; the limb was removed by amputation. The patient did well.

(July 6th 1848.)

Dr. Percy presented drawings to illustrate the morbid appearances in the following case:—

TUBERCULAR MATTER IN THE CEREBELLUM; TUBERCLES STUDDING THE PERITONEUM, VISCERAL, AND PARIETAL; TUBERCULAR MATTER IN THE FALLOPIAN TUBES AND UTERUS; NO TRACE OF TUBERCLES IN THE LUNGS.

Mary Ann Hands, aged 18, coach-lace weaver, admitted into the Queen's Hospital, March 6th, 1845. Occupation—confining; aspect pallid. She was apparently quite well until the last two months, during which time menstruation, which commenced two years ago, has not occurred. She now complains of pain in the head, compared to a weight shifting from one part to another, but generally seated at the occiput; no globus; appetite tolerable; "food lies rather heavy;" flatus; tongue coated; bowels generally confined; pulse languid; thirst; urine copious and pale.

R. Inf. Calumbæ, oz. vj.; Dec. Aloes, Co., oz. ij. M. Sumat oz. j. ter die. Hora somni sumat Pil. Hydrarg. gr. iij., cum Extr. Coloc. Co., gr. x.

Dry cupping to the nape; ordinary diet; to walk out frequently.

March 15th. Pain at the occiput much relieved: immediate relief from dry cupping, continuing about three hours afterwards; complains of sharp pain in the temples, occurring frequently and lasting about ten minutes; appetite good; bowels regular. Cont. mist. et habeat mist. purg. oz. iv.

22nd. Headache still relieved by dry cupping; dimness of sight previously complained of continues; appears stupid and inactive.

R. Ferri Sulph., gr. ij.; Extr. Aloes, Pil. Rhei Co., utrque, gr. iss. Fiat pilula, ter die sumend. Olei Ricini, oz. ss., cras mane sumend. Dry cupping to be repeated.

24th. I learned to my surprise, that the patient died

suddenly yesterday. At my visit on the 19th, I found her in bed in a somewhat excited condition, which I was inclined to attribute to the fact of her having passed a stool involuntarily. I was not apprised at the time of the occurrence of anything like a fit; the nurse merely said that the patient had had an unfortunate accident, which she attributed to a purgative medicine taken that morning. To-day, however, on minutely interrogating the nurse, I find, that, agreeably to my direction, the patient had been walking out in the garden before my visit at eleven; that she came in about half-past nine, sat down on the bed-side and complained of feeling very ill; she immediately afterwards reeled and fell on the floor, and during that time passed a stool involuntarily. Ten minutes elapsed before she was able to speak, when she asked for water; half an hour afterwards she appeared to be well again, and in the following afternoon was *very lively*. During the last three days she had seemed decidedly better than ever since her admission; and when I saw her last she made no particular complaint, although from her appearance and dimness of vision, I entertained a suspicion of the possibility of cerebral mischief. At ten minutes past eleven, on the 23rd, after conversing as usual, she was again suddenly seized with reeling; she struggled and became "black in the face." She was immediately laid on the bed and expired; again an offensive stool was involuntarily passed. She had vomited at half-past nine, after breakfast. She had never made the slightest complaint of abdominal pain. There had been neither numbness nor loss of power in any part. The hearing was as good on one side as the other. I had remarked that the pupils were generally large; but at my last visit I observed that they were less than natural.

On the 28th I saw her aunt, with whom she lived, and received the following information:—During the first six years of her life she was a delicate child, but ever since, until Christmas last, she had enjoyed good health. She had a severe attack of scarlatina, when about six years of age. The illness commenced with severe *frontal* headache, which she said "was not like a headache," and which she relieved by tying a handkerchief round her head. She became dull, stupid, and inactive, and her aunt "feared she would lose her senses." About a month ago, between seven and eight at night, she rose suddenly from her chair, put out her hands, and called to her aunt "to come and hold her." She was put down upon her chair, she had slight convulsive twittings of hands and feet, but to a greater extent in the latter than the former; her countenance was pale and her eyes were closed, and "she appeared almost dead." There was no convulsion of face. She continued quite insensible in this condition for about a quarter of an hour, when after the application of a piece of singed rag to the nostrils, she recovered as though from a swoon; she did not pass a stool during the attack. About a week afterwards, she remarked to her aunt, that the "pain was gone to the back of her head, and was confined to a space about as large as a five-shilling piece, and it appears to her as though there was something alive in it." She had been subject to a discharge from each ear. Her aunt

never heard her complain of abdominal pain. From the commencement of her illness she has occasionally vomited her food; but of late the vomiting had been less frequent. She had neither brother nor sister alive. She lost a sister ten years ago by measles. Her mother died seven years ago, at 35, "rather suddenly." Her father is still alive. Before she came into the Hospital, she had been under the care of Dr. Sandys at the Dispensary.

Autopsy at four p.m. Present—Dr. Fletcher, and Mr. Turner.

Head first examined. On removing the *dura-mater* we were struck with the *flattened* appearance of the cerebral surface, as though the skull had been too small for the brain; the arachnoid seemed to be drier than usual; there was some congestion of the vessels of the *pia-mater*. The brain was sliced off *in situ*; the bloody points were more numerous and conspicuous, and the blood was evidently more liquid than usual; the lateral ventricles were fully distended with limpid liquid. We remarked nothing abnormal in other respects. The choroid plexus appeared quite healthy. I then removed the brain, and proceeded to examine it from the base. There was no sign of excessive congestion on the surface in any part. I sliced it up in every direction, but without discovering any evidence of disease until we reached the cerebellum, when we found distinct deposit of tubercular matter, of about the size of a walnut, situated posteriorly immediately beneath the surface, near the line of junction of the lobes, but principally on the left lobe. There was also a cretaceous tubercle, of the size of a large pea, on the right of the collection of tubercular matter, which was of tolerably firm consistency, and which, except into two or three internal points, had not softened. The presence of the matter was instantly and distinctly recognized by touching the external surface of the cerebellum. *Chest*: Old adhesions on the right side. We examined the lungs most carefully in every part by slicing, but without discovering a trace of tubercle. Knowing this to be the exception to Louis's law, we were the more minute and careful in our examination; frothy red serum exuded copiously by section. The heart was small, but in every respect normal. *Abdomen*: No peritoneal effusion. Every part of the peritoneum, (visceral as well as parietal,) was thickly studded with translucent tubercles, of a greyish colour, and of the size of an ordinary pin's head. The omentum, which was similarly affected, extended to the pelvic cavity, and adhered to the peritoneum lining the lower part of the abdominal parietes anteriorly. *Liver*: Patches of old adhesion here and there to diaphragmatic surface; structure appeared to be healthy. Gall-bladder moderately distended with bile, of ordinary consistence and colour. No gall-stones. *Spleen*: Tubercular points, of the kind above described, scattered over the surface, but no tubercular matter in the interior. The surface obtained by section attracted our attention, the fibrous portions being more conspicuous than usual. *Pancreas*: No morbid appearance. *Kidneys* healthy in structure, but congested. *Uterus*: Fallopian tubes considerably enlarged, and containing true yellow tubercular matter. The uterus

was cut open vertically; the internal surface presented a striking appearance. On careful examination, and scraping cautiously with the scalpel, we found it to arise from true tubercular degeneration of the mucous membrane itself. We remarked nothing unusual in the ovaries. The peritoneal covering of the uterus was studded with minute tubercles. *Stomach and Intestines*: The vessels appeared generally much congested; every portion of peritoneal covering was studded with minute tubercles. One portion of the ileum was somewhat contracted by a strip of membrane passing from it to an adjacent piece of intestine. The whole intestinal tract was laid open, but we remarked nothing abnormal in the condition of the mucous membrane.

Observations.—1. The history of this case is deserving of special attention. No symptom at first came to my knowledge, to indicate the existence of serious disease, for I had heard nothing of the fit with which the patient had been seized previously to her admission into the hospital. Having been engaged in a sedentary and confining occupation, she had not menstruated for two months, and in such circumstances nothing would be less likely to excite surprise than the occurrence of cephalalgia of one kind or another. The pain was chiefly referred to the occiput, although it was not exclusively confined to that part. Some days after her admission, I noticed particularly her complaint of dimness of vision. There were only three positive symptoms present to point to the disease of the cerebellum,—viz., *pain at the occiput, dimness of vision, and the convulsive attack*; and as I have before remarked, I was ignorant of the last before her decease. There was no ground for supposing the presence of tubercular matter in the lungs, and hence on the authority of Louis, and of observers generally, there was strong negative evidence against the presence of tubercular matter in the brain. Louis, at one time, it will be remembered, stated it to be a *general law*, that “after the age of fifteen, tubercles do not present themselves in any organ without being likewise seated in the lungs.” (Transl. by Sydenham Soc., p. 153.) But since the first promulgation of that law, several exceptions have been published, of which Louis himself alluded to three, in his second edition, and the present case is an addition to these exceptions; still the law must be received as *general*, though not *universal*.

Of the numerous published cases of the occurrence of tubercular matter in the cerebellum, I may, with propriety, introduce the following, recorded by Abercrombie, (“Diseases of the Brain,” 3rd ed., p. 168,) on account of its similarity in many respects to the case of Hands.

“A gentleman, aged 34, in the year 1825 first began to be affected with occasional attacks of headache, which were usually accompanied by vertigo and dimness of sight. In 1827 the pain became more severe, and was distinctly referred to the occiput and superior part of the neck. He had generally remissions of it through the day, and aggravations in the evening. In the spring of 1828 the symptoms increased in severity, but he received

considerable relief from blistering. In the summer he went to the country, where his general health was much improved, and his headache greatly mitigated. He continued in this improved state till May 1829, when the attacks of headache were again aggravated, accompanied by giddiness, and on one occasion he fell from his chair. In October of the same year he began to be affected by a most distressing sensation of throbbing, referred to the back part of the head; and he was also affected with vomiting, which continued without intermission for three weeks. The paroxysms of headache were now aggravated to an intense degree of severity; they occurred chiefly in the evening, from six o'clock till midnight, but also at other times in the day. During the more severe attacks his face was flushed, the vessels of the temples were remarkably distended, and he lay in a state nearly of unconsciousness, unable to speak, and with his hands and arms spasmodically contracted. He still had occasional vomiting, and intense acidity of the stomach, and several times complained of double vision. The pulse was generally natural. His situation was now considered as nearly hopeless, and no relief was obtained from any remedies; but after five or six weeks of intense suffering, the symptoms gradually remitted, and during several weeks in December and January, he continued almost free from headache; he was able to walk out, and his general health was greatly improved. In February, 1830, the symptoms again increased, but the pain was now chiefly complained of above the eyes; the remissions also were more complete, and upon the whole his sufferings were less severe than during the attack in November. In March his complaints again subsided, and he was able to take a good deal of exercise in the open air, and to attend a good deal to his business. He had still occasional attacks of headache, but they were not severe, and his condition was considered as much more favourable than it had been for a long time. In the middle of April the paroxysms of headache became more severe, but by no means in the degree in which they had occurred on former occasions. He was not confined, and no degree of apprehension was excited until the 24th, when, in one of those paroxysms, he suddenly expired.

“*Inspection*.—The ventricles of the brain contained from three to four ounces of limpid fluid, but the surrounding parts were entirely healthy. Imbedded in the substance of the left lobe of the cerebellum there was a tubercular mass, the shape and size of a very small walnut; externally it was firm, and presented the usual appearances of the scrofulous tubercle, internally it was softened, with the common appearance of unhealthy scrofulous suppuration. The substance of the cerebellum around it was entirely healthy. No other appearance of disease was discovered in the head, and the other viscera were sound.”

2. The presence of tubercular matter in the uterus and Fallopian tubes in this case is extremely interesting, on account of the comparative rarity, and upon this subject I may appropriately cite the observations of the great observer in phthisis, M. Louis, (“Transl. of Louis by Sydenham Society,” p. 119.) “Since the publication of the first edition of this work I have not met with tuberculous disease of the uterus more frequently than before;

out of two hundred phthisical females and upwards, three only furnished examples of that condition. No doubt, indeed, can be entertained of its rarity, for, as has been observed by M. Reynaud, in an excellent "Essay on Tubercles in the Uterus," Bayle makes no mention in his "Researches on Pulmonary Phthisis," of an anatomical alteration of the uterus, referable to tuberculous degeneration of the organ. No example of the kind is to be found in the "Clinique" of M. Andral.* Laennec is silent on the point. And M. Reynaud himself, during a sojourn of six years in the Paris hospitals, (five of these in La Charité,) employed as he was in opening a great number of bodies, met but once with the lesion in question. In the year 1830, while engaged in clinical observations at the Hospital of La Pitié, the same inquirer met with two additional cases of tuberculous affection of the uterus. The subject of one of these cases, aged 39, menstruated first at the age of twelve, and continued to do so in a regular manner until 1829, having had some favourable confinements. She died after nine months' illness. On examination after death, softened tuberculous matter, mixed with mucus, which flowed forth upon slight pressure of the neck of the uterus, was found in the interior of the vagina, together with a multitude of ulcerations, varying in size from that of a lentil to that of a centine, of more or less irregular shape, with a red fundus, and much more numerous at the posterior than lateral aspects of the passage; there were none of them anteriorly. The uterus was a little more than three inches and seven lines (9 centimetres), long, and the anterior lip of the neck somewhat swollen; the interior of this part exhibited a yellowish colour, and contained a stratum of tuberculous matter, the most superficial part of which could be easily rubbed away, while the most deeply-seated, one line (2 millimetres), thick, was combined with the substance of the uterus, irregular in outline, and divided by a number of broken furrows, which gave it something of a mammillated aspect. Besides this, the tissue of the uterus sent into the substance of this tuberculous stratum certain processes, from which sprang a multitude of delicate vegetations, capped as it were with tuberculous matter. A tubercle, of the size of an ordinary pea, was found in the substance of the body of the uterus, and underneath the tuberculous stratum: its tissue was somewhat greyish, and slightly transparent, so that it might be made a question whether this state had not, as in the lung, preceded the yellow and opaque. The Fallopian tubes, too, were filled with tuberculous matter, and their calibre increased to more than five times the natural amount; their internal surface even exhibited tuberculous matter."

Abercrombie also ("Op. cit.," pp. 164, 165,) relates the case of a young lady, aged 18, in which tubercular matter was found in the right hemisphere of the brain,

in the cerebellum, and in the lungs. "There was" also "much disease of the uterus and ovaria, which were considerably enlarged, and the Fallopian tubes, in particular, were very much enlarged, and distended with a soft cheesy matter of a yellow colour."

Dr. Carswell appears not unfrequently to have met with tubercular matter in considerable quantity in the uterus and Fallopian tubes. He remarks that he has "found the cavities of both filled with it, and the Fallopian tubes distended to the size of the finger or thumb."—"Cyclop. Pract. Med.," vol. iv., p. 258.

In the *Medical Gazette*, July 4th, 1845, vol. xxxvi., p. 40, is an interesting statistical paper "On the Presence of Tubercles in different Organs," translated from the *Gazette Médicale*, January, 1845. The facts were obtained by M. Cless, of Stuttgart, from the examination of upwards of 160 bodies affected with tubercular disease. "In twenty-six women who died of pulmonary phthisis, tubercles were found in the genital organs; once in the walls of the uterus; once in the peritoneal covering; twice on the internal surface of the uterus; once the whole substance of the uterus was converted into tuberculous matter; twice the ovaries were the seat of tubercles; and four times the Fallopian tubes were filled with tubercular substance. The tubercles in the genital organs were always secondary to the general tubercularization, especially occurring where the abdominal viscera were the seat of disease."

Dr. Watts, of Manchester, has also an interesting case of the existence of tubercular matter in the Fallopian tubes of an unmarried female, aged 24, who after having been long subject to menorrhagia, ultimately died of phthisis. "The uterus and ovaries were healthy, but the Fallopian tubes were crammed full of tubercular matter, and distended so as to equal the little finger in size. The coats of the tubes were considerably thickened, but not remarkably congested. Both lungs were infiltrated with tubercle in every lobe, and in the superior lobe of each were numerous cavities. No other organ was diseased." *Medical Gazette*, Dec. 24, 1847, vol. xi., p. 1115.

3. It is worthy of remark, that notwithstanding the copious diffusion of minute tubercles over the whole peritoneal surface, yet there was neither abdominal pain nor tenderness, nor other symptoms to indicate this diseased condition. However, these milary translucent granulations were only in their incipient state.

Foreign Department.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DE MEDECINE, PARIS.

EXTRA-UTERINE PREGNANCY: GASTROTOMY.

Subsequent to our last report, M. Tueffard presented the details of a case of *extra-uterine pregnancy cured by gastrotomy*. The patient, a little, thin but healthy woman, aged 40, previous to the commencement of her present illness, had been pregnant five times. Of these, the first four pregnancies ended

* I do not, however, find this statement confirmed by reference to the "Clinique Médicale" of M. Andral, who thus writes, ("Cl. Med. Transl. by Dr. Spillan," 1836, p. 542,) "We have found these tubercles in the tissue of the uterus, in the ovaries, and even in the substance of the Fallopian tubes; but these cases are uncommon, and the genital organs of both sexes must also be placed among those parts which, in phthisical patients, become least generally the seat of tuberculous degeneration."—J. P.

in premature labour at seven months, the fifth arrived at full term. The extra-uterine was the sixth pregnancy. The foetal movements were very perceptible up to the sixth month, when after exertion the patient felt the child suddenly start up towards the left hypochondrium, and then fall back again in the iliac region of the same side. She had at the same time violent abdominal pain and considerable hæmorrhage. From this time the foetus ceased to move, and the body diminished in size. Her symptoms afterwards were frequent and copious hæmorrhages of periodical occurrence, in the intervals excessive abdominal pain. When seen by the author these symptoms had continued for six months. He discovered a tumour above the right groin, in which it was easy to perceive the form of the foetus. The os uteri was healthy and closed, the cervix of its natural size, and the whole organ was moveable. The patient being very anxious for an operation, after the inhalation of æther the author made an incision over the tumour, in a direction parallel to the linea alba. After dividing the skin, muscles, and peritoneum, he came upon a whitish membrane, forming a cyst and containing a matter very similar to adipocire; below this was another cyst which contained the limbs and trunk of a foetus, the head and upper extremities having escaped into the general cavity of the peritoneum, to which they had contracted firm adhesions. Further examination shewed that the fundus of the uterus was destroyed, the cyst containing adipocire being closely adherent to, and forming one cavity with the uterus; the cysts were removed and the abdominal incision closed by interrupted suture. As the vagina communicated directly with the peritoneal cavity, it was not necessary to insert a tent into the lower part of the incision, the discharges being enabled to draw off *per vias naturales*. The subject of this extraordinary case is said to have perfectly recovered.

The Academy was subsequently occupied with a renewed discussion on the fatal cases of chloroform inhalation, but nothing transpired worthy of further notice.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DES SCIENCES, PARIS.

PERIOD OF INCUBATION OF ANIMAL POISONS.

M. Renault detailed some experiments instituted for the purpose of determining the period of incubation of certain animal poisons,—as glanders, and the sheep-pox? (*virus claveloux*.) The result demonstrated that in the former, the lapse of an hour was sufficient to prevent all chance of benefit from excision or cauterization; and in the sheep, cauterization within ten minutes of presentation proved equally unsuccessful.

LOCAL ANÆSTHESIA.

M. Roux read a memoir on local anæsthesia, chiefly by means of chloroform. He states that the local effects of this agent vary accordingly as the patient in

an operation had or had not been submitted to inhalation. In the latter case the local application of chloroform to a wound was followed at first by intense pain and heat, which was, however, soon replaced by cessation and a calm which lasted for many hours. If, on the other hand the patient had inhaled chloroform during the operation, he did not feel the local application at all, and many were thus enabled to avoid the pain which usually follows surgical operations. M. Roux has also used chloroform with advantage as an injection for the cure of hydrocele.

ON

LIFE INSURANCE AMONG MEDICAL MEN: PROVIDENT SOCIETIES: ANNUITY & ENDOWMENT INSTITUTIONS: AND THE BENEVOLENT FUND.

By WILLIAM NEWNHAM, Esq., Farnham.

As an abstract question, there are, probably, few who would have the hardihood to doubt the existence of much real distress amongst our professional brethren and their families, nor the paramount duty of endeavouring, on the one hand, to relieve that distress, and, on the other, to prevent its occurrence. But how comes it that, as a practical question, this duty is not regarded as imperative upon each individual, according to the means which he possesses? and that almost every one differs from his neighbour, as to the best means of accomplishing the object in view?

For the sake of our common humanity, it is to be hoped that the former arises in a great measure from not being acquainted with the extent of the evil, and from a forgetfulness of the necessity for doing *at once* that which may be done at any time, and which is consequently unhappily adjourned from day to day, till the day of thought and action has passed by. Yet is it to be remembered, that ignorance and forgetfulness are *both criminal*; they are not excuses for a neglect of duty; there is no excuse for not possessing knowledge which may easily be obtained; and to adjourn the action grounded upon such knowledge till to-morrow, is only the intense folly, or worse than folly, of him who postpones the saving of a starving fellow-creature till to-morrow,—till death has closed upon his miseries, and for ever shrouded to-morrow from his sight.

There may be a difference of opinion as to the mode of preventing this distress, or of relieving it when present; but it is a remarkable fact, that no one of the different plans which have been proposed for these purposes, is adequately supported. And it is an equally remarkable fact, that a profession which is celebrated for the amount of time, and energy, and cash which it gives away unrequited, amongst the poor, and others who can render no recompense, should, as a profession, be so backward in relieving the necessities of its own brotherhood. Far be it from me to suppose that this backwardness should originate in the fact, that the former species of charity will be sure to pay in the long run, in some way or another, while the latter could

have no possible reward, except in the approbation of the conscience. Far be it from me to suppose that this backwardness could have its origin in that jostling rivalry of an overstocked profession, in which each one becomes jealous of his neighbour getting a slice from his own loaf, and, therefore, does not cultivate the finer feelings of friendship and kindly feeling towards others in the same pursuit. I can scarcely think that such motives can operate extensively; and I would really believe, that ignorance of the extent of the evil, and forgetfulness of the time for applying the remedy, are the great efficient causes of the neglect, which in itself is undeniable.

Be it ever recollected, however, that these are *criminal* causes,—that their influence is deeply culpable,—and that he who neglects to relieve distress, is but a shade less guilty than he who occasions it.

I propose to pass in review in this paper the several methods which have been devised for the relief of professional distress. These all may be referred to a two-fold principle,—prudence on the one hand, pure benevolence on the other. I would by no means assert, that the plans which have been grafted upon the *former principle*, have not derived their source from the benevolence of their originators, or that there is not a large amount of charity in the hearts of their supporters. But the principle is a different one, and is most obvious: the one being to *provide* for one's own necessities as well as those of others, upon the mutual principle of all provident institutions, that those who do not require assistance will contribute towards those who do; while the second or purely benevolent principle, is one which associates around it those who have no selfish or mutual interest in the institution, but who combine to relieve the necessities of those who are *unprovided for*.

It may indeed be said, that there should be no one unprovided for,—that every one should have made a store during the summer of his days, against the contingencies of his age, and the winter of sickness,—a species of argumentation very common with Poor-Law Guardians, since poverty has been treated as a crime. We are quite disposed to admit that there is a general and prevailing improvidence amongst us as a body; and that by early marriage,—by a very pardonable desire to keep up appearances of respectability,—by a certain degree of hospitality which can be ill afforded,—by the effort to give one's children education suited to the advanced and still progressive state of knowledge around us,—by the wish that our children should advance rather than retrograde from their social position,—and by little personal indulgences which are not strictly consonant with that rigid and parsimonious economy, which alone can make our ill-requited services adequate to the yearly expenditure, we may really dissipate that which might have been laid up for a rainy day. But, after all, this is parallel with the poor man, who during the winter's want of work, gets into debt for the necessities of life, hoping during the summer, by longer days and increased exertion, to clear off his debts, and to obtain clothing for his children. And perchance he may do so; but if illness,

or misfortune, or the want of work befall him, he is pauperised, and requires relief. And so, if illness in his family, or infirmities, or losses, or changes in the neighbourhood, or a thousand other fluctuations, interfere with the due supply of income, then does the medical man become incapable of *providing* for himself,—then does he become dependent upon the aid of others.

There must always be two classes of misery,—the one, which may relieve itself by mutual combination; the other, which can only be relieved by the gratuities of those who can spare something from their riches, or out of their deep poverty, for the relief of others still poorer than themselves. We shall consider first the several ways in which persons may provide against their own necessities.

I. By life insurance. No prudent and unselfish person should neglect this method of providing for his family, in the event of their being deprived of his support, and of the income arising from the continuance of his exertions. It is, however, obvious that this is a purely unselfish proceeding, and that the insurer himself can derive no return for the privations to which he may be subjected in order to furnish the annual premium; his compensation consists in the most agreeable thought of taking every possible care of his family, and saving them from dependence upon a selfish world. It is also obvious that they only are benefitted by life insurance who die early, and that they who live to advanced age would have done better by having been their own insurers, and by having accumulated their own premiums, and improved them at compound interest by a yearly re-investment. It may indeed be true, that if the removal of the premium at a given period were not a matter of *necessity*, the money would in all probability be spent, instead of being invested. Considering this, therefore, and also the uncertainty of the continuance of life, so that no person can presume upon himself as long-lived, it may be fairly said that every professional man should insure his own life, according to his ability, not, however, too largely, since the event of his living incapacitated by illness, the continuance of his premium may become a very heavy difficulty to himself or his friends. An instance of this kind occurred to a very eminent physician of his day, who, in the hour of his greatest prosperity, had insured his life for £20,000. He was attacked by paralysis; never earned another guinea; and it was only by the very great exertions of his family (those most interested it is true) that the life policies were kept afloat for the seven yet remaining years of his life.

Admitting, then, the principle, that every medical man should insure his own life for the benefit of his family, the kind of office he should select is not a matter of *indifference*, because his object should be the most ample security, at the least possible rate of premium. An Insurance Office upon the *strictly mutual principle*, giving *no commission* to agents—spending very little upon advertisements—depending for extension upon the influence of mutual good feeling,—with a board of directors of known probity and worth, and responsibility,—and *diminishing* its premiums after the

first five years, should be the office to be chosen. The only office *approaching* this description among ourselves is the Medical, Legal, and General; and, with some little modifications, this has an especial claim upon our patronage, and then it would soon be placed in a very elevated position. Still, in order to realise my *beau idéal* for a good Insurance Office, it must *allow no per centage to agents, and it must diminish its rates of premium after five payments*. It should ever be remembered, that all the expenses of agency (at least five per cent.) are so much over and above what is necessary to represent the actual risk to the Society, and is, therefore, over and above what is necessary to *security*. And to make these plans quite safe to the office, there is only wanting an *esprit de corps*, a spirit of mutual interest, and a desire to promote mutual-kind offices,—a spirit which we may rather hope for in future than proclaim its present existence.

II. Some provision may be made for his own declining years by purchasing a deferred annuity, to commence at 60 or 65, so as to furnish him with some extraneous income, when his own professional energies begin to fail, or to be trenched upon by the younger and more active competitors.

III. Another form of providing for the future, is the purchase of an annuity for a widow when she becomes such; or of a joint annuity, to commence at the failure of the first life, whichever it might happen to be,—the latter plan realising the double object of providing for one's own feebleness, should it occur, and for a widow should our own life fail.

But these intentions cannot be fulfilled without a very considerable outlay: they can only be fulfilled by an accurate appreciation of the value of life—and where a sufficient amount of premium is given to cover the risk of professional existence. If this be not carefully attended to at the outset, disappointment must inevitably occur. Money cannot be made to multiply itself by any species of spontaneous generation, or by any other than ordinary means; it is at all times a sufficient risk to run, that the annuity, so purchased, may never be available to either of the parties, and therefore, that the money so advanced would be entirely lost; but this risk is not equal to the disappointment, that although the circumstances have occurred, the consequences have not followed. This is the great evil attaching to an annuity fund propounded by a most benevolent individual, whose sanguine calculations have led him to the belief, that a yearly guinea will secure annuities of £20 or £25 a year to as many claimants as may happen. Here everything will seem smooth for a few years, till the laws which regulate mortality, bear upon results, and then it will be found to fail from the want of a due appreciation of the risk incurred in a society where, ultimately, the great mass of mutual annuitants will consist of those who expect to derive a probable benefit from its agency,—where no difference of payment is made according to the age of the individual,—where no accurate calculation has been established for the difference of risk in the single and married,—nor of the age of the wife; and where, on the first occasion

that there are four annuitants to be chosen, and there are five candidates, all these candidates must be submitted to the humiliating necessity of canvassing every one of the subscribers in order to secure a preponderance of votes; and after all, one of the five must inevitably be disappointed.

IV. Another method of providing for futurity, is, by the endowment of children, so as to receive a certain sum at a certain age, in the event of each child reaching that age, the term being fixed for the most expensive period of education,—or for the first outfit in life,—or for an apprentice premium,—or marriage fortune,—or any other similar contingency. All these, however, involve a considerable outlay, and it is doubtful whether any ordinary professional income can afford such an outlay. Probably *one only* of these several methods of provision must be selected; and if so, undoubtedly life insurance should be that one, except in extreme cases, where the widow and children have been ultimately provided for by marriage settlement, or some such arrangement, but where cash is wanted from the present annual income, to provide for the education of the children who shall be at college, or requiring an expensive outfit, during the lifetime of the father.

V. It is very much to be regretted, that no institution yet exists among ourselves, whereby sickness of more than a temporary character could be provided for, and the expense of an assistant could be met, or the wants and the comforts of declining health could be provided for. Several instances of this kind have occurred to me within the last year, where the health has been irretrievably broken,—where, for three, four, five, or even more years, the last days of the husband have been watched over most affectionately by a wife, who, at his death, and on her first entry on the rugged path of widowhood, would have spent the last shilling, and be found pauperized—actually dependent for bread, upon the tender mercies of a Board of Guardians. This extreme state of destitution could have been provided against by an insurance for sickness, after the manner of benefit societies, only upon juster calculations, and more in accordance with the principles of the Clerical Institution. The last few years of my life, have been partly given towards effecting an institution of this kind, ever since my letter to the Journal, written from Bedgellert, in August, 1843. Hitherto no successful result has issued, but with my firm character, “Hope on, Hope ever,” is my motto, and “*nil desperandum*” is my badge.

VI. Another method of providing for the future, is by belonging to one of those excellent institutions, which offer certain advantages to their members, arising from a certain number of their own subscriptions, and from the additions made to such subscriptions by members who have no prospect of participation, and whose only object is to do good to their less fortunate brethren. These institutions partake, therefore, of a mixed character; they are *provident* in so far as regards their members who may become claimants by themselves or their families; they are *benevolent* in so far as regards those members who are subscribers purely for

the good of others; and their design is excellent, though limited.

There are before me ten laws and reports of eight institutions of this kind in the metropolis and different sections of the provinces. It had been my design to have given an enlarged statistical view of the operations of these societies in their several localities, and to have gone fully into their respective merits and agencies, but I have not been able to obtain such precise information as to their *boundaries*, their management, and the relative proportion of subscribers to the mass of practitioners within the district embraced, or of those who might probably become claimants upon the fund, to enable me to do so with precision, and I must, therefore, content myself with some general observations.

It may be remarked of all these, and affiliated societies, that their *permanent efficiency* must depend upon the maintenance of a due proportion between the available income and the claims made upon the funds; and it would appear that these institutions had been managed with such an amount of prudence, and such an apportionment of the annuities granted, that up to this time their resources have been found ample, and their capital has accumulated.

And since it is not often that we find institutions of this nature becoming rich, where the chances have not been nicely calculated, it becomes us to inquire into the causes of this wealth, and especially to ascertain if the reference be legitimate, that it is because they are not *actually and practically required*. For a reply to this question, I would refer to the published opinions of the secretary of the largest of them, for London and its vicinity, who feelingly laments the frequency with which he is assailed by claimants, to whom he is obliged to reply that they cannot be relieved, because they are not *members*, or the representatives of such. The reason, therefore, of the accumulation of capital, is, not that there is not widowhood and orphanhood in abundance to be relieved, but that the widows and orphans have no title to relief under the present constitution of these societies, *except by membership*; indeed, on looking over the list of contributors there are certain things which cannot fail to strike the observant eye; as, first, the *immense preponderance* among the members, of those who cannot, by any positive calculation, be supposed to have subscribed for themselves, but only as an act of charity towards others, who, less fortunate than themselves, may become claimants.

Secondly, separating those who cannot, by any ordinary contingency, become claimants upon the fund, we are next surprised at the *small number remaining*, of whom it may be supposed that *their* widows and orphans may become dependent for aid, and who may be said to have become members with the provident intention, of laying up in store for those who may be left behind, in the event of their early death; and when it is recollected that *comparatively few* of these will die before their wives, or leaving children unprovided for under *fourteen* years of age, or not leaving behind them an income of £50 a-year, we cannot be astonished that the income of these societies should exceed their expenditure.

Thirdly, we are surprised, by the very small number of subscribers of both classes, as compared with the number of medical men living in their respective localities. Here the disproportion is so enormous, as to lead to the conclusions that the proportion of medical men with superabundant incomes is very small; that the number of those who will save from scanty incomes for charitable purposes, by acts of self-denial, is still smaller; that the number of those who avail themselves of these institutions as a provident resource is very limited; that amongst the mass of medical men, there are some *who could, but who will not*, provide for their families, because they prefer the enjoyment of their own little luxuries, (*Curpe diem—minime credula postero*;) but there is also a very considerable number who cannot, by the most rigid economy, carry this self-denial privations further; and who cannot, let the consequences be what they may, spare the cost of membership to any of these valuable institutions.*

There is then a class of sufferers who have no refuge in these amicable societies, and there is a class of distress to which they are utterly inapplicable; and for these sufferers, and for their families, and for their distress, so shut out from all other aid, THE BENEVOLENT FUND is provided.

(To be continued.)

NOTES ON AMERICA: ITS MEDICAL SCHOOLS AND ESTABLISHMENTS.†

By EDWARD HUMPAGE, Esq., M.R.C.S., Bristol.

The other Medical School to which I referred is connected with the College of Physicians and Surgeons, although not so large as the University Medical School. It is well conducted, and numbers among its professors some very able men. The lectures commence in November, and continue four months. The Museum of Anatomical Preparations and Morbid Specimens is well arranged and extensive; it contains also some fine models of skin diseases, executed by the late Doctor Thenard, of Paris. I was particularly struck with those representing that horrid disease—glanders, in the human subject.

The number of students this session was above 200: they appeared very well conducted persons, differing in no essential particulars from our own medical classes but in that most disgusting and filthy practice of chewing tobacco, the effects of which were everywhere apparent, and brought to my mind the philippic of James I., in which the royal author, speaking of tobacco, says—"It is loathsome to the eye, as well as harmful to the brain." I must not, however, be understood as stating, that all the medical students I saw in the schools practised this abomination; there were, happily, many gentlemanly exceptions, but, alas!

* On the subject of provision for families, see a valuable paper by Dr. Holbrook, of Cheltenham, which will be inserted in a subsequent number of this Journal.

† Continued from page 136.

the floors, the staircases, the lobbies of lecture rooms, told a tale of tobacco, and spoke of *salivary stimulation*, too plainly to be misunderstood.

But I turn from this digression, to speak with pleasure of the politeness with which the lecturers in this school received me. The chemical professor, Doctor Torrey, the professor of anatomy, Doctor Watts, and the professor of surgery, Dr. W. Parker, were exceedingly kind; and I had much satisfaction in attending the last gentleman's surgical clinique, delivered to the class every Monday, from eleven o'clock until one, p.m.

Dr. Parker has been in Europe, is an accomplished surgeon, in middle life, and enjoys a deservedly high reputation among his medical brethren and the citizens of New York. He is a good medical surgeon, if I may so speak, and prefers ankylosis, with all the trouble of obtaining it, to the more brilliant and *far easier* plan of getting rid of the disease by amputation. I attended this gentleman's clinique on two or three occasions, and some of the cases I will now relate.

The first person who presented himself was a man aged 35, suffering from diabetes; this patient passed more than two gallons of saccharine urine daily; he was very thin, of a cadaverous aspect, had lost his virility, and suffered from great thirst. The supposed cause of his disease was indigestion, from drinking bad water at New Orleans, from which city he had recently come. Dr. Parker gave the class a very concise history of the various theories and plans of treatment which medical men had proposed, but he still regarded its pathology as *sub judice*, and its treatment as empirical. In this case he recommended animal food, and simple drinks,—as cocoa, milk-and-water, and occasionally small doses of potash, tincture of iodine, warm baths, and Emplastrum Belladonnæ constantly over the loins.

Hemiplegia Dr. Parker treats with considerable success by strychnine.

Dr. Parker's comments on a case of phthisis were highly practical. The patient was subjected to a good examination, both as to the physical signs and also the constitutional; much stress was laid on a due observation of each class. Among the former symptoms he appeared to attach much importance to the effect of tubercle, producing *increased resonance* from the superior conducting medium through which the sound passes. He places much reliance on the use of the spirometer, and stated his experience as to the curability of the disease to be, that out of seventy-three cases twenty recovered, the patients getting well being for the most part thirty years of age.

"I know," said the Professor, "it is a *squally* position to be placed in, to have tubercle in the lungs, but it is curable by good food, fresh air, and an *equable* temperature, not hot, but even as low as 40° Fahrenheit if you please. Hence the climate of Canada is far better than that of New Orleans. I go for out-doors in these cases, rather than apartments regulated at an artificial temperature. Make your patients take much passive exercise, as on horseback, or at sea. This was old Sydenham's plan."

A case of tumour of the lower lip presented itself in a great smoker. Dr. Parker remarked that it was

encephaloid, and not *scirrhus*. "We must fix it,"* said he, and forthwith the operation was very neatly performed.

The other cases on that occasion were ovarian dropsy, ascites, and diabetes, concerning all of which Dr. Parker spoke in a manner well calculated to impress his auditory with the soundness of his judgment, and the practical quality of his observations.

In a case of paralysis (from lead,) of the extensors of the wrist and fingers, he directed the attention of the class to the characteristic *blue line* round the gums, and suggested, as the best treatment, good diet, constant support, with an India-rubber splint, and the occasional application of electricity.

(To be continued.)

General Retrospect.

PHYSIOLOGY.

EXHALATION OF CARBONIC ACID IN HEALTH AND DISEASE.

The following conclusions are arrived at by M. Hervier. :—

In a Healthy state of System.—1. The exhalation of carbonic acid varies from hour to hour, with the variations of the barometer, the maximum being at nine in the morning and eleven at night; the minimum, at three in the afternoon and five in the morning.

2. The variations in temperature and barometric pressure are in inverse ratio as regards the exhalation of carbonic acid.

3. During digestion the oxygenation of carbon is diminished. The ingestion of animal food diminishes the quantity of expired carbonic acid; the reverse is the case with vegetable food.

4. In running the expired air does not contain carbonic acid.

5. It is the same after the inhalation of æther and chloroform, and after the use of alcoholic beverages.

6. During sleep less carbonic acid is expired than in the waking state.

7. The air expired by infants contains a larger proportion of carbonic acid than that breathed by adults.

In a Pathological state.—1. In meningitis and other well-defined inflammations, the quantity of expired carbonic acid is increased.

2. Pneumonia, pleurisy, pericarditis, &c., are an exception to the rule.

3. Persons labouring under rheumatism expire an increased quantity of carbonic acid.

4. More is evolved also in intermittent fever, and especially in the hot stage.

5. Less carbon is consumed in the eruptive fevers, in scorbutus during suppuration, and in the syphilitic cachexiæ.—*Gazette Méd.*, Feb. 24th.

* A curious Americanism, meaning, in plain English, we must remove it.

PATHOLOGY.

ANEURISM OF THE CORONARY ARTERY.

Dr. Bevill Peacock reports a case of this rare lesion, premising it with the account of the only two cases he is able to find; one published in the *Bibliothèque Méd.*, 1812; the other in the *Archiv. Gén. de Méd.*, 1843.

A man, aged 51, a butcher, admitted into the Royal Free Hospital, in December, 1847, labouring under influenza, formerly of irregular habits. When examined, he was much collapsed, with severe cough; pulse 144, feeble; tongue furred. Auscultation revealed the crepitation of the prevailing epidemic. He was cupped between the shoulders, and took ipecacuanha, with compound spirit of ammonia and paregoric. On December 4th, he was slightly better, and for three days continued to improve, but he then became more torpid and feeble. A more stimulating treatment was substituted, together with a blister to the chest. On the 12th he complained of pain in the left side of the chest, pulse 120, intermittent. There were loud sonorous rhonchi; and in the region of the heart a peculiar sound like that of beating egg with a spoon. This disappeared next day, when he died.

Post-mortem examination. In addition to emphysema of the lungs, the pericardium was found to be distended with sero-purulent fluid, with lymph of soft consistence. At the upper and outer part of the left ventricle, there was a protuberance the size of half a walnut, which was found to be an aneurism of the coronary artery. The cavity of the aneurism was filled with coagulum; the other artery was ossified.—*Edinburgh Monthly Journal*, March, 1849.

PATHOLOGICAL APPEARANCES IN CHOLERA.

The alterations observed by M. Virchow, in the intestinal canal consist in an uniform invasion of the entire mucous membrane, without any special affection of the glandular apparatus. It is true that the solitary glands are sometimes diseased as well as those of Peyer, but these lesions are far from constant. The changes in the mucous membrane itself are very like those of diphtheritis, commencing in intense hyperæmia, with extravasation of blood, and the exudation of a whitish membrane. At this period the microscope exhibits an amorphous granular matter, interposed between the fibres of the mucous membrane, which becomes partially sphacelated. These changes are mostly seen at the lower end of the small intestine. It should be remarked that these diphtheritic appearances were not constant.

The intestinal secretions sometimes contained albumen, at others only saline ingredients. The mesenteries were almost constantly infiltrated with a peculiar whitish granular matter.

The author also frequently met with engorgement of the spleen, but this was chiefly among boatmen, many of whom had been the subjects of intermittents.

The stomach was not remarkable for any constant morbid appearance, it was generally distended and intensely injected. An epithelial exfoliation was

always seen in the duodenum, and its villi were often infiltrated with fatty matter. The gall-bladder always contained an abundance of bile. The liver was pale and exsanguine. The calices of the kidney exhibited capillary injections, with increased epithelial secretions. The bladder was always empty, and closely contracted. The lungs collapsed on opening the thorax; their inferior lobe was often engorged. In several cases the author found interlobular emphysema. The pleura was sometimes covered by patches of false membrane. The heart was pale, and rigidly contracted on the left side, but the right cavities were always gorged with dark coagulated blood, mixed with fibrinous concretions, in which were globules resembling pus. The veins were generally gorged with black blood, while the arterial system was empty. The heart was always healthy.

Such were the appearances in the algide period of cholera. In cases which died during the typhoid period, signs of inflammation with exudation were observed in various organs. It was at the commencement of this stage that the diphtheritic patches were commonly noticed, both in the intestines and in the vagina, especially when the patient had been seized during menstruation. The lungs sometimes exhibited apoplectic extravasations. In the kidney there were often seen the appearances indicative of acute albuminous nephritis.—*Gazette Méd.*, Jan. 20th.

PRACTICAL MEDICINE.

ON INUNCTION WITH LARD IN SCARLATINA.

The following plan of treatment in scarlatina is advised by Manthner, an undeniable authority in diseases of children. He observes :—"I owe to M. Schneeman an excellent method of treating scarlatina, and one from which I have derived the best results; this is, the inunction of the entire surface with lard. These inunctions never do harm; they are cheap, and may be employed by all classes. I am confident that they cause desquamation to take place more readily, and that dropsical sequelæ are less likely to occur. Moreover, if used as a prophylactic, the disease is less likely to spread in a family. I would, without hesitation, treat my own children in this manner, where they attacked by a disease which I so much dread, but I should fear to employ cold affusions.—*Rev. Méd. Chir.*, Jan., 1849.

EXPRESSED JUICE OF THE COTYLEDON UMBILICUS IN EPILEPSY.

Mr. Salter, of Poole, narrates an instructive case of severe epilepsy which, after resisting orthodox treatment, yielded to the above remedy, prescribed by an extra-professional adviser. The plant, which belongs to the order Crassulacæ, is allied to the genera *Sedum* and *Sempervivum*, and is found generally growing on shady damp rocks. It figures in a Herbal, published by Elizabeth Bakearch in 1737, as being beneficial in liver and kidney diseases, in piles, &c.

The extract of the plant is stated to have been used successfully by Dr. Bullar, of Southampton, who will

one day publish his experience of its action.—*Medical Gazette*, March 2nd.

TREATMENT OF NEURALGIÆ ACCORDING TO THEIR SEAT.

[The author, M. Sandras, passes successively in review neuralgia of the fifth pair of the cervical plexus, ilio-sciatal neuralgia, crural and sciatic neuralgia. His treatment is expressed in the following *resumé* :—]

Neuralgia of the fifth pair yields more readily than any other to the internal administration of belladonna. He has also derived benefit from a plaster of the black cyanide of potassium. The pomade of strychnine has only appeared useful when, after the attack has subsided, the skin has retained an exaggerated sensibility.

In temporal neuralgia, with the employment of belladonna internally, he conjoins compression of the temporal artery.

In suborbital neuralgia, the endermic use of morphine, and the cyanide of potassium, succeed better than in temporal or cervical neuralgia.

In submaxillary neuralgia, belladonna is the most useful remedy; compression of the carotid likewise affords relief.

The same treatment is beneficial in cervical and occipital neuralgia, but in this form compression of the artery is of little or no use.

The treatment is likewise the same in intercostal crural, and sciatic neuralgia, but the author observes that these forms are often accompanied or produced by neuritis, and that it is therefore advisable to premise the treatment by topical abstraction of blood.—*Gazette Médicale*, December 30.

SURGERY.

ANEURISMAL TUMOUR OF A BRANCH OF THE EPIGASTRIC BURSTING INTO THE SCROTAL SAC.

The following case is narrated by Dr. Kreider, of Lancaster, Ohio, U.S. :—

George Hanstein, aged 48 years, stone-cutter, presented himself for relief, June 27th, 1841. About twelve years ago, while engaged in turning a large granite block, one corner of the stone came in violent contact with the os pubis, on the left side of the root of the penis. A stinging pain was felt for some time after the accident. A few days afterwards, a small pulsating tumour (about the size of a hazelnut,) was found to occupy the seat of the injury. This tumour very slowly enlarged ever since that time, until it attained the size of a large hen's egg. It has at no time been a source of much inconvenience. A week since the man went to bed as usual. About midnight he awakened suddenly, feeling a stinging pain about the place of the tumour, and putting down his hand to the part, was surprised to find that the tumour had disappeared. He soon, however, discovered that the scrotum was much enlarged, and that this enlargement was rapidly augmenting. The following are the dimensions of the scrotum at this time :—Length, two feet; circumference near the apex, seventeen inches; at the middle, twenty-two inches. Upon making an incision into the scrotum upon the left side, a large quantity

of partially coagulated arterial blood escaped. Finding that hæmorrhage still continued, I dilated the wound upwards, and found the bleeding vessel to be a branch of the epigastric, the vessel which had been originally injured, forming an aneurism, whose walls giving way, had suffered blood to escape and find its way into the scrotal sac. The vessel was secured by ligature; the coagula entirely removed from the scrotum, and the wound closed by interrupted sutures and adhesive strips. Some slight suppuration followed, but in a few days the parts healed, and the man speedily and perfectly recovered.—*Ohio Med. and Surg. Journ.*, Nov., 1848.

CASE OF VOLVULUS CURED BY GASTROTOMY.

The subjoined case is interesting as an illustration of the value of surgical aid in a class of internal diseases, which if left to themselves almost invariably terminate fatally :—

L. S., a man of strong condition, aged 30, the subject of right inguinal hernia, exerted himself in lifting a heavy burden after having eaten a large quantity of cherries without rejecting the stones. While thus employed he felt a pain in the lower part of the body, which soon extended over the whole abdomen. On being removed to hospital it was discovered, not as was expected, that his hernia had become strangulated, but that a tumour the size of the fist was found in the right iliac fossa. Although there was neither vomiting nor absolute constipation, the surgeon suspected a volvulus. The presence of some obstruction was soon after rendered certain by the occurrence of all the symptoms of strangulated hernia, and after the ejected matter had become stercoraceous, an operation was decided upon.

The patient accordingly being authorized, an incision was made of four inches in length; the peritoneum being carefully opened the intestines were found to be extremely distended; the tumour was formed of the ileum near the caput cæci, one loop of which had completely encircled another, which contained several cherry stones, and was so firmly constricted that its liberation was impossible. This being the case, the operator divided the constricting loop, and the strictured part being set free the wounded intestine was united by suture and the parts replaced.

The after-treatment consisted in the local application of ice, and its use internally. After a few days a dose of castor oil was given, which brought away a large quantity of cherry stones *per vias naturales*. Subsequently, however, sloughing took place, and fæces escaped through the abdominal incision, but in spite of this untoward event the man recovered.—*Il Raccoglitore Medico*, Sept. 1848.

IMPROVED OPERATION FOR CONGENITAL PHYMOSIS.

The operations proposed for the above defect are—1, circumcision; 2, simple incision of the prepuce over the surface of the glans.

The objections adduced by Mr. Colles to circumcision are, that from the greater retraction of the outer fold of the prepuce, a second proceeding is necessary to free

the more adherent inner fold; and that from the contraction after cicatrization, great pain arises during erection. As an improvement on the ordinary method, Mr. Colles advises the following:—

He seizes the edge of the prepuce in the left hand, and holding the scalpel in the right, and at right angles, he removes a circular portion of skin, about a quarter of an inch wide; the outer fold of skin is then drawn back, leaving the glans still covered by the inner fold. He divides this layer about half way back, directly up the centre. He then turns the two angular flaps thus made, outwards, and unites each angle to the outer skin, about a quarter of its circumference from the frenum. A slight suture at the frænum completes the operation. The part is then drawn forward, so as to cover the glans. In two or three days union takes place, and so little deformity results, that in some cases it would not be known that any operation has been performed.—*Dublin Quarterly Journal*, Febr., 1849.

CALOMEL AS A LOCAL APPLICATION TO CHANCRE.

Dr. Hartshorne dresses obstinate chancres and ulcerated buboes in this manner. After sprinkling calomel freely upon them he covers them with lint dipped in a solution of chloride of soda.—*American Journal of Medical Science*, Jan. 1849.

OBSTETRIC MEDICINE.

UTERINE INJECTING APPARATUS.

Dr. Jones has devised an apparatus for injecting the vagina and other canals, which deserves to be extensively known, from its simplicity and cheapness. It consists of a vagina or other pipe, connected with gutta-percha tubing, divided into two lengths, one of seven feet and a quarter, the other of one foot and three quarters. To one extremity of the longer portion a lead weight is attached, and to the other end the male portions of an union joint, made of box. To the corresponding end of the shorter portion is affixed the female portion of the joint, and the other end is adapted to the vagina or other pipe. The mode of using it is, first, to introduce the pipe into the vagina, with the shorter portion attached, the patient sitting over a bidet, or other convenience. The larger portion is inserted by its weighted end into a tub or vehicle containing the injection, and placed at a corresponding height above the patient. The tube is then exhausted by an inspiration, and rapidly inserted into the other. The fluid immediately flows in a continuous stream to any quantity that may be required. The apparatus is improved by the use of a speculum, with a lid pierced with two holes, one for the insertion of the vaginal pipe, the other for a tube to act as a waste pipe. By this means a douche can be thrown directly on the os uteri. A modification of the pipe adapts the apparatus for injecting the rectum, external ear, &c.—*Lancet*, Febr. 17.

MEDICAL LEGISLATION.

MEMORIAL TO THE RIGHT HONOURABLE SIR GEORGE GREY, BART., M.P.

The undersigned Members of the Medical Profession, practising in Manchester and its immediate neighbourhood, beg to express the gratification which they feel at the interest you have evinced in the subject of Medical Legislation, and to offer you, at the same time, their best thanks for the efforts you are making to bring about a satisfactory settlement of the question.

They feel bound, however, to offer you the very serious objections which they entertain to a scheme proposed for the purpose, embodied in certain "Outlines of a Bill for regulating the Profession of Physic and Surgery," which is contained in a "Report on the present state of the Medical Reform Question, published by the Council of the National Institute of Medicine, Surgery, and Midwifery," which Outlines, it is stated, have been submitted to you by a conference of delegates from the principal Medical Corporations in London, as likely to be acceptable to the profession at large.

The undersigned Memorialists would observe, in the first place, that no satisfactory reasons exist for the establishment of a College of General Practitioners in England, when no corresponding institution is proposed for Scotland and Ireland; and they see, moreover, no good reason why any such incorporation should be proposed at all. It has been urged that the Royal College of Surgeons of England, unlike that of Scotland or of Ireland, has always been an institution for the promotion of Surgery merely, on which account the Council have constantly repudiated any arrangement whereby future members of the College should undergo some comprehensive examination in all the sciences, an acquaintance with which is more or less required in the several exigencies of medical and surgical practice. The undersigned, however, would submit that the voice of the great majority of the profession, and the all but unanimous disposition of members of the College, should be paramount to the antiquated conceptions of certain members of the Council; and they would urge that the English College, either by legislation, or by royal charter, should be so far assimilated in its constitution to those of Scotland and Ireland, that one scheme of medical polity should uniformly apply in every part of the United Kingdom.

The undersigned would urge upon you, that any alteration in the constitution of the English College of Surgeons, at the instance of its virtually irresponsible Council, is deemed by them to be quite out of the question, and yet without an alteration in its present constitution, harmony between the College and the great body of the profession cannot be re-established. They would recal your attention to the circumstance, that legislative enactments, some years ago, harmonised municipal institutions with the spirit of the age, irrespective of the feelings of irresponsible councils; and they would submit, that no grounds exist for the application of a different principle in the treatment of Medical Corporations. But even if it were conceded that the establishment of the College of General

Practitioners in England were a necessary or a good thing, the undersigned maintain that the kind of institution proposed would fulfil none of the ends for which such a College has been stated by the conference to be required; for, by the draft of the charter which is solicited, it is proposed to admit doctors and bachelors of medicine to the membership, without any further examination, in this way leaving the public, to whom they thus become certificated as general practitioners, without any guarantee for their practical efficiency in midwifery or pharmacy, and giving them, moreover, equal advantages with those who have been examined in every department of the profession. The Memorialists would observe, that attendance upon lectures, without the expectation of examination on the subject of the same, is notoriously a mere formality. A still greater anomaly exists in the proposal to enrol, in the College of General Practitioners, persons holding the diploma of the English College of Surgeons, seeing that it is merely a testimonial of anatomical and surgical proficiency; but if this circumstance were passed over as a mere temporary evil, necessary for the adjustment of certain existing anomalies, the proposed scheme of the conference would permanently establish the practical absurdity of authorising the Fellow of the College, without any medical examination whatever, not only to practise every department, but further to do so with the prestige of superior rank. If then the Council of the College of Surgeons be sincere in its declarations, that its purpose is merely to educate anatomists and practitioners in what is called pure surgery, it is a flagrant injustice to the community at large that they should thus confer privileges to practise the profession generally.

The Memorialists hold, that if a College of General Practitioners is to exist at all, it should be for the three kingdoms, and as a common portal to all who enter the profession with the intention of practising the same in all its departments; and they would remind you that, except in the metropolitan and some other of our leading cities, almost all members of the profession are general practitioners, whatever be their academic or collegiate distinction.

The Memorialists would further observe, that no legislation can be acceptable to the great body of practitioners in England, that may in any way ratify the arrangements introduced into the College of Surgeons by the charter of 1843. In remedying the retrospective injustice perpetrated by that enactment, they would urge you (in any Bill that may be introduced), to abolish the distinction in the register to be made between Fellows and those who were members prior to the grant of the charter in question. They would more especially urge upon you, that the distinctive classification of a register should have regard not only to collegiate rank, but to the actual circumstances of practice; for example, that to be registered as physician, the doctor or bachelor of medicine should practice in that capacity,—that to be registered as surgeon, the fellow or member should at least cease to dispense his own medicines,—and that all, whether doctors of medicine, fellows or members of colleges, should be required to register as general practitioners, if such be their actual position.

The Memorialist, however, would again submit, that for all purposes benefitting science or the community, there is no requirement for any additional college, and that no practical advantage can result from any such three-fold classification in the proposed register as that just referred to; because, out of London, the actual condition of the profession would be found to have no reasonable correspondence with the same.

They would, in conclusion, earnestly entreat you to decline becoming a party to any legislation in the spirit set forth in the "Outlines of a Bill" published by the Conference of Delegates. They have to state, moreover, that if, unfortunately, from the extraordinary activity and perseverance of a very small minority of the profession, any such Bill should pass into a law, members of the English College of Surgeons will, in many cases, feel bound to decline being placed on the register altogether, rather than to occupy therein an unjustly subordinate position. The Memorialists sincerely hope that the members of the College will not be driven to so extreme a proceeding; but they are convinced, at the same time, that if the course of events should call upon them to take such a step, they will not hesitate to do so.

Signed by 142 leading members of all classes of the profession, residing in Manchester and its immediate neighbourhood, including—Edmund Lyon, M.D., J. L. Bardsley, M.D., Consulting Physicians to the Manchester Royal Infirmary; W. J. Wilson, F.R.C.S., Senior Surgeon to the Manchester Royal Infirmary; Thomas Radford, M.D.; John Windsor, F.R.C.S.; John Robertson; W. W. Bevan; Daniel Noble; R. H. McKeand; George Southam; Thomas Dorrington; J. B. Harrison; F. Renaud, M.D.; J. Black, M.D.: A. M. Heath; Jos. Denham; John Rayner, F.R.C.S.; Thomas Fawsitt; J. Yorke Wood, &c. &c.

LOCAL APPLICATION OF CHLOROFORM IN OTALGIA AND ODONTALGIA.

"A Correspondent" recommends the use of chloroform in "otalgia and odontalgia," in both of which he has never yet known it fail in giving instant and permanent relief. In "otitis," and in the painful rising of the teeth in children, before they are sufficiently near the surface to obtain any relief from lancing the gums, he has found the most pleasing effect, producing, in most cases, that quiet and refreshing sleep showing the freedom from pain. Its application is simple. He says,—“In the former simply scrape a little lint, drop a drop or two of the liquid on it, and apply to the ear or tooth; in the latter I rub the gums with the finger moistened with the liquid, and the effect is immediately manifest. I have used it in the form of gargle, in cyanche, when it has been accompanied with severe pain, with such good result, that I feel convinced if once or twice tried, its use will soon be general. One drachm, to one ounce of distilled or rain water, is the proportion for the gargle. If you have not used it in neuralgia, more particularly of the face and eyebrow, I think you will find it worth the trouble to saturate a piece of lint with it, and apply it to the painful part.”

COD-LIVER OIL IN PHTHISIS.

Dr. Ranking, of Norwich, is collecting evidence respecting the value of cod-liver oil in phthisis, and would feel particularly obliged to any members of the Association who will favor him with the results of their experience. The names of such contributors will be scrupulously given on publication, in connection with their contributions. The points to which he would respectfully direct attention are—

Number of cases, successful and unsuccessful.

Stage of the disease in different cases in which it was exhibited, as marked by the physical signs.

Degree of amendment produced, and its duration.

Quality, dose, &c., of the oil.

General effects as regards diminution of night-sweats, expectoration, and increase of weight, &c. &c.

Any other information deemed valuable.

Medical Intelligence.

TESTIMONIAL TO MR. THOMAS HUNT,

OF BEDFORD SQUARE, LONDON, (LATE OF HERNE BAY.)

An elegant silver salver has been presented, by the inhabitants and visitors of Herne Bay, to Thomas Hunt, Esq., surgeon, on his removal from that place to London, "as a memorial of his professional ability, and personal kindness and attention, during a period of twenty years."

AMERICAN ESTIMATE OF NATIVE MEDICAL LITERATURE.

It cannot be denied that the great *forte* of American medical scholarship has hitherto consisted in "editing" the works of British authors. The Committee are not disposed to deny the fact that this business has been carried on in every shape and labour-saving fashion. A tacit alliance between writers and publishers has infused the spirit of trade into the very heart of our native literature. The gilt letters of the book-binder play no inconsiderable part in the creation of our literary celebrities. Sometimes the additions by the "American Editor" have been real and important; oftener nominal and insignificant. The following calculations of the proportion added to different recently-published works taken at random, will show the average amount of material so contributed. The editor's proportion was, in two instances, one-fourth; in two more one-eighth; in one, one-ninth; in another, one-tenth; in others, one-fifteenth, one-seventeenth, one-nineteenth, one-twentieth, one-twenty-eighth, one-fifty-ninth, one-sixty-fifth, one-ninetieth, one-hundred and seventh, and in one instance, such a sprinkling as a single penful of ink might furnish, and leave enough to spare for a flourishing autograph. The fairest fruits of British genius and research are shaken into the lap of the American student, and the great danger seems to be, that in place of the genuine culture of our own

fields, the creative energy of the country shall manifest itself in generating a race of *curculios* to revel in voracious indolence upon the products of a foreign soil!—*Transactions of the American Medical Association*, 1847.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members Friday, March 23rd:—Messrs. A. Bowden; H. Cholmeley; G. T. Talbot; J. C. Bompas; J. Dorrian; G. Clarke; J. Pritchard; H. B. Clarke; T. F. Clay; G. J. Brown; J. Wilkins; J. Gibbons.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates Thursday, March 15th:—Theophilus Taylor, Hereford; John James Williams; William Nicholson Price, Leeds; Thomas Newham, Rothwell, Northamptonshire; John Livy.

Thursday, March 22nd:—George James Thurston, London; William Carrol Satchell, Newport, Isle of Wight; Henry Geary, Atherton, Leicestershire.

OBITUARY.

Died, January 16th, at Queen Camel, Somerset, (where he had resided in the active discharge of his professional duties upwards of sixty years,) Robert Jey, Esq., Surgeon, at the advanced age of 88, much regretted by a large circle of patients and friends.

March 15th, Robt. Abraham Varicas, Esq., M.R.C.S., late of Woburn Place, Russell Square.

March 19th, at Oulart, of malignant fever, caught in the discharge of his duty under the Board of Health, Robert Harvey, Esq., L.R.C.S.I.

March 24th, at Woolwich, aged 70, Dr. Parkin, R.N., of Cawsand, in the county of Cornwall, Inspector of Fleets and Hospitals.

Lately, at Coote Hill, of fever, Muns Walsh, M.D., Medical Attendant of the Fever Hospital and Dispensary.

Lately, at Ilfracombe, Devon, John Sommers Down, M.D., aged 65.

TO CORRESPONDENTS.

Communications have been received from Mr. Bowring; Dr. Davies; Mr. Newnham; Mr. Humphry; Mr. A. Prichard; a Quiet Man; Dr. Holbrook; Mr. Garlick; Mr. Toynbee.

Mr. Parsons' request shall be attended to.

It is requested that all letters and communications be sent to Dr. Streeten, Foregate Street, Worcester. Parcels and books for review may be addressed to the Editor of the Provincial Medical and Surgical Journal, care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON SURGERY,

DELIVERED IN THE
MEDICAL SCHOOL OF CAMBRIDGE.

By GEORGE MURRAY HUMPHRY, Esq., Downing
College, Surgeon to Addenbrooke's Hospital.

LECTURE VI.

SUPPURATION; ABSCESS.

Characters of Pus; Essential and Non-Essential constituents; Process of Suppuration, and Formation of Abscess; Nature of Pus Corpuscles, their Number and Regularity of Shape proportionate to the Activity of the Inflammation and Vigor of the patient.—Abscesses may remain stationary, may disappear; Changes in Pus preceding its Absorption; Cases in which Absorption most easily occurs; Mode of Advance of Abscesses to the Surface; Reasons for their generally Bursting Externally; Sometimes Burst into Internal Cavities.—Resistance offered by Fibrous Tissues and Bone; Contrast the Effects of Abscesses and Simple Tumours or Aneurisms; the difference owing to Inflammation attending the former; Diagnosis of Abscesses; Causes of Error.—Treatment of Acute Abscesses; Reasons against too early and too late Incisions; Selection of Spot for Incision.—Fistulæ: Causes and Treatment.

The next product of inflammation we have to consider is pus—a viscid, opaque, creamy fluid, of a white colour, composed of corpuscles floating in the liquor puris, which closely resembles the serum of the blood. If pus be allowed to stand for a short time in a deep vessel, you may witness the separation of these two components; the corpuscles subside towards the bottom, and a thin clear fluid occupies the upper part of the vessel. The essential ingredients of pus are the corpuscles, which vary in size but are generally somewhat larger than those of the blood. They are of spherical, elongated, or oval shape, uneven and granular on the surface, and insoluble in acetic acid or a solution of ammonia. The irregularity of their shape and outline is most marked when the pus is ill formed,—when it is the result of languid inflammation, or when it occurs in delicate scrofulous persons. These corpuscles possess all the usual elements of a cell—viz, a nucleus, cell, wall, and contents. The two former are composed of a modification of fibrin, and the contents of the cell consist of a fluid resembling the serum of the blood; the albumen dissolved in this

fluid may be coagulated by heat, alcohol, &c., and the cell is thereby rendered opaque. The corpuscles are formed according to the ordinary mode of cell development, by the agglomeration of molecules into a nucleus around which the cell wall is produced; and a number of little granular masses may commonly be found in pus, which are probably the elementary cells in their different stages of development.

The essential constituents of pus, then, are corpuscles with peculiar characters, floating in liquor puris, but there are commonly found in addition other ingredients intermixed with these, resulting from the particular locality or the circumstances under which the suppuration has occurred,—such are epithelial cells, fragments of tissues, blood corpuscles, flakes of lymph, and some oil. A peculiar substance named pyine has been described as existing in pus, and was thought by Guterbock to be characteristic of it; but it appears to be often absent in well-formed pus, and occasionally to be present in certain other morbid formations, such as carcinoma, when no suppuration is going on.

The formation of pus is the result of some peculiar change produced in the fibrin of the blood by the inflammatory process, in consequence of which its particles having passed through the walls of the vessels, unite into corpuscles resembling the exudation corpuscles in many respects, but differing from them in the important particular that they are incapable of entering into any higher state of organization, or of acquiring an organic connection with the adjacent living structures. They are, therefore, foreign bodies, and produce precisely the same effects as foreign bodies of any other kind would do under similar circumstances.

The changes in the fibrin which ultimately lead to the formation of pus corpuscles, take place gradually as the inflammation advances in severity, so that we commonly find in the same spot various products indicating the alterations which the fibrin has undergone during the several stages of the inflammation. The fibrin first effused having acquired the properties, on account of which the term coagulable lymph has been applied to it, sets into a soft jelly-like substance in the interstices of the tissues, and renders the part more or less firm or indurated. As the inflammation proceeds, some of the fibrin further altered by the process, becomes converted into pus corpuscles. This usually takes place at the centre of the inflamed part, so that the pus surrounded and walled in by the previously effused and coagulated lymph, forms a cavity in it, and

increasing in quantity stretches this lymph and the surrounding tissues which, blended together, constitute a capsule or sac, containing and isolating the pus. A collection of pus contained in a cavity thus formed, is called an abscess.

With a few exceptions, to be presently mentioned, the suppuration takes place at one spot, and the pus is all contained in one cavity formed at the point where the inflammation is most active. Or if it be not originally contained in one cavity it very soon becomes so, by the softening and absorption or breaking down of the septa, which may intervene between the separate drops first effused. The destruction of these septa, and the formation and enlargement of the cavity caused by the increasing quantity of the pus, is facilitated by the changes induced in the surrounding tissues by the inflammatory process, which predisposes them to yield to interstitial absorption when they become subject to the pressure of the pus.

While the formation of the pus is thus proceeding in the middle of the effused lymph, organization is going on at its circumference. The lymph there situated having been less affected by the inflammatory process becomes converted into tissue supplied with vessels, and constitutes the vascular pyogenic membrane of the abscess. At the same time, the lymph occupying the intermediate position between the circumference of organization and the centre of suppuration, acquires characters intermediate between pus and organized lymph, and forms the soft greyish semi-purulent layer usually found lining the interior of an abscess. Some flakes of it also generally become detached from the vascular membrane and mixed with the pus. The further formation of pus in the cavity of the abscess may depend in part on changes in this soft semi-purulent substance, but it probably results chiefly from the continuance of the effusion of fluid fibrin from the sac into the cavity of the abscess, and its subsequent conversion into pus. This conversion of the newly-effused fibrin into pus is no doubt in some measure determined by the assimilative influence exerted upon it by the already existing pus corpuscles, with which it becomes intermixed in the cavity of the abscess; the fibrin being more amenable to such an influence in consequence of the changes it has undergone in its passage through the vessels and the substance of the pyogenic membrane.

Pus corpuscles have been supposed to consist merely of blood-corpuscles, which have undergone some alteration in size and shape; and certain observers have persuaded themselves that they were fortunate enough to witness the transformation of one into the other under the microscope. This transition, which subsequent investigators have not been sharp-sighted enough to discover, is highly improbable, for the blood globules do not, under ordinary circumstances, transude through the walls of the vessels, and varieties in their shape and size in different animals, are not attended with corresponding varieties in the shape and size of the pus globules. Mr. Gulliver has ascertained that the latter are circular in animals whose blood-globules are oval, and that the size of the one is not much influenced by that of the other.

The notion that pus consists of the disintegrating fragments of tissues broken down by the inflammatory process was exploded before the microscopical examination of the fluid disclosed the distinct organic structure of its constituents. That it is altogether a new formation, and not composed of the detritus of dissolving tissues, is proved by the existence of large abscesses and the discharge of considerable quantities of matter for a great length of time without any perceptible destruction of the adjacent solids.

The only case in which it is at all probable that pus is formed by the solution or disintegration of an existing tissue is that of coagulated lymph or fibrin. We every now and then meet with instances in which masses of fibrin or lymph, both in the large vessels and among the tissues, are to a greater or less extent softened into a fluid which in general characters bears close resemblance to pus, and may practically be regarded as such; but the researches of Mr. Gulliver, detailed in the "*Medico-Chirurgical Transactions*," show that this fluid does not respond to the chemical and microscopical characters of true pus. He finds that the granules and masses of softened lymph, have neither the shape or appearance of pus corpuscles, and they are soluble in acetic acid and a solution of ammonia. There can be no doubt that the induration occurring in the early stages of inflammation generally subsides during the process of suppuration, but we cannot therefore infer with certainty that the coagulated lymph upon which the induration depends, undergoes solution into pus, probably it is absorbed in consequence of the pressure of the accumulating pus upon it.

The thickness of the pus or rather the quantity of the pus corpuscles, is proportionate to the abundance of the fibrin from which they are formed. It is therefore greatest when the inflammation is active and the patient of vigorous constitution; and pus is said to be good, laudable, or healthy, when it is thick and the corpuscles contained in it are numerous and well formed. In delicate subjects whose inflammatory attacks are generally of low languid type, the pus is thin, the corpuscles scanty and ill-formed, many of them not attaining to more than the nucleus stage of development, and others of varying size and irregular shape. Some time ago I opened a chronic abscess in the thigh of a delicate lad. The fluid evacuated was thin, like serum, so that I should scarcely have recognized its nature but for a small quantity of the thicker more purulent matter which flowed when the cyst was nearly empty; a few days after the opening had been made, the abscess became inflamed and a considerable quantity of thick creamy pus issued from the wound; gradually as the inflammation subsided, the pus resumed its thin watery characters, showing the temporary increase of consistence to have been dependent merely on the passing inflammatory attack.

It may occur to you that you have often seen very thick matter evacuated from the chronic abscesses of delicate scrofulous persons, but you have probably remarked that the pus is in such cases curdy, of unequal consistence, and that it owes its thickness, not to the presence of an unusual quantity of corpuscles, but to

the intermixture of flakes and masses of soft, sodden, yellowish, semi-purulent lymph, which are particularly likely to form in these subjects.

Pus possessed of specific qualities presents no peculiarities appreciable by chemical or microscopical observation, which might serve to distinguish it from ordinary pus. We have at present no means of distinguishing wherein consists that subtle essence which makes the pus of the venereal ulcer to differ from that of a common phlegmonous abscess.

I have already said that the corpuscles of pus are incapable of any higher degree of organization—that they are not transformable into any tissue, and do not acquire a nervous or vascular connection with the rest of the body. They may remain for months, and probably for years, without undergoing any particular change; so that it is not safe to decide against the presence of an abscess merely on the ground of the long duration of the swelling. You have seen an abscess removed from the arm of a woman which had existed for more than a year, and another of five years' standing opened in the neck of a man. These are, it is true, exceptional cases, but it is necessary to be aware of their occasional occurrence. In angular curvature of the spine, an abscess not uncommonly remains dormant for a great length of time upon the fore part of the carious vertebræ.

Sometimes pus is absorbed, and the abscess disappears. A series of changes in the contents of the abscess must take place before this result can be accomplished. The liquor puris is first absorbed, the corpuscles remaining for a longer period; gradually these collapse, become broken up and converted into a soft greasy mass, like curded cream or putty, which is seen with the microscope to be composed of small granular molecules, presenting few characters to distinguish them from other dissolving or decomposing organic structures, such as tubercle, cancer, &c.; they may remain in this state for a long time, or, undergoing further liquefaction, they may be completely absorbed. The containing cyst at the same time contracts so as to occasion some puckering of the surrounding soft parts, and is, at length, converted into cellular or fibro-cellular structure.

Apprehensions of the ill effects likely to arise from the presence of pus-corpuscles in the blood owing to the absorption of pus thus effected from the interior of an abscess, are quite groundless, because the corpuscles cannot be absorbed in their entire state; they must undergo solution before these can pass through the lining of the abscess and the walls of the vessels into the circulating current. The innocent qualities of the fluid resulting from their solution is sufficiently proved by the numerous cases in which the contents of abscesses have been absorbed without any injurious consequences.

It now and then happens that the soft greasy contents of an abscess, formed by the partial disintegration of the corpuscles, instead of undergoing further solution, become infiltrated with carbonate and phosphate of lime, and are converted into a mass like mortar or chalk. The sac of the abscess may in like manner become calcified into an earthy crust. Specimens of this kind are occa-

sionally to be met with in the liver, and more frequently in the upper parts of the lungs, and in the absorbent glands of the abdomen and chest. Uneven irregularly-shaped mortar-like masses, which seem to result from calcareous degeneration of abscesses and their contents, are also sometimes found beneath the skin, and in various other parts of the body. They occur most commonly in scrofulous persons, but are by no means always to be regarded as an indication of scrofulous diathesis.

The liquor puris is the ingredient of an abscess which is first and most easily absorbed, and the corpuscles offer the greatest resistance to the process, it being necessary, as a preliminary step, that they should undergo solution; you will, therefore, be prepared to learn, that the spontaneous disappearance of abscesses takes place most frequently when they have been the result of a low degree of inflammation, and in weak delicate persons, because in such cases the liquor puris bears a large proportion to the corpuscles, and the latter are imperfectly constructed, of irregular shape, and often do not pass beyond the nucleus stage of development. The same is probably the explanation of the fact, that pus is more easily absorbed when it is formed in connection with ulcerated bone than under other circumstances, for the subjects of such abscesses are commonly in indifferent health, and the attendant inflammation is often of languid sluggish character.

The termination of an abscess by the absorption of its contents, and the shrivelling up of its sac, is comparatively rare, and scarcely ever occurs when the abscess is the result of acute inflammation. Pus once formed generally acts as a foreign body or irritant, and there is no rest till it has been evacuated; the irritation occasioned by it keeps up the surrounding inflammation, and this leads to the further formation of pus, which, increasing in the cavity of the abscess, enlarges it, distends the lining membrane, and compresses and displaces the adjacent parts. The effect of this pressure upon the surrounding tissues, already softened and disposed to absorption by the inflammation which first occasioned and accompanies the further formation of the pus, is to promote their absorption, and thus make way for the advance of the abscess.

In considering, therefore, the advance of an abscess, and the mode in which it affects the adjacent tissues, there are two chief circumstances to attract our attention:—first, the pressure occasioned by the pus accumulating in the cavity of the abscess; and, secondly, the inflammation attending the formation and progress of the abscess and rendering the surrounding structures more amenable to the effects of the pressure. The combined operation of these two influences sufficiently accounts for the various routes which acute and chronic abscesses in different parts of the body are observed to take, and for their ultimately reaching the surface in the great majority of instances.

The pressure of the increasing fluid contained in the cavity of an abscess is, if we except the influence of gravity, equal in every part of the circumference of the abscess; but its effects are chiefly witnessed in the direction of least resistance, where the structures yielding to it with greatest facility are most easily stretched; for there is some relation between stretching

and absorption, and pressure most easily gives rise to absorption when it is most productive of stretching. Thus, if an abscess occur upon the exterior of the thorax, the pressure of the pus contained in it is equal towards the surface and towards the interior of the body, but on the one side it is resisted by the firm unyielding parietes of the chest; whereas, on the opposite side the integuments and other soft structures being comparatively unsupported yield to it, and are thrown into a curve, so that the abscess acquires a semicircular shape, one side being flat, the other curved or stretched. It is in this latter direction that the effects of the pressure in promoting absorption of the tissues are most observed. A gradual thinning of this outer wall takes place, and proceeds, till at length it gives way or bursts, and suffers the pus to escape; whereas the soft parts, forming the inner wall of the abscess, subjected to an equal amount of pressure, but supported by the parietes of the thorax, and so maintained in their natural position, undergo very little change.

The direction in which the pressure of pus in an abscess is most felt, depends in some measure upon gravity, being greatest at the most depending part; hence an abscess on the fore-part of the lumbar vertebræ, makes its way down in the course of the psoas muscle, where the fine loose cellular tissue offers little resistance, and it usually presents in the thigh.

It generally happens that the outer side of an abscess is, from mechanical causes, the least able to resist the pressure of the accumulating fluid, and this alone is sufficient to account for the fact that the greater number of abscesses burst externally. But another cause operates in producing the same result, which is the greater disposition to inflammation evinced by the tissues lying on the superficial, than by those on the deep side of the abscess. This circumstance, noticed by John Hunter, and supposed by him to depend on a law of nature comparable with that by which vegetables approach the surface of the earth, renders the superficial textures less capable of resistance, softens them, and makes them a more easy prey to absorption. It is chiefly observable in acute abscesses, and, together with the sudden stretching to which the parts are subjected in consequence of the quick formation of pus, accounts for the rapidity with which they find their way to the surface, and also for the well-known fact, that abscesses situated deeply, in close contact it may be with internal cavities, do generally approach the surface of the body, and burst in that direction.

The liability of serous cavities to the discharge of pus into them, is further diminished by the disposition of their lining membranes to the effusion of lymph, which agglutinates their surfaces, and protects their cavities; nevertheless the event occasionally takes place. Abscesses have descended from the upper part of the neck in the loose tissue which surrounds the great vessels, and have burst into the pleural cavity; and they have occasionally made their way into the peritoneal sac from the liver, and from beneath the abdominal muscles. The cavities of the joints may suffer in the same manner. A psoas abscess sometimes passes through the bursa on the under surface of the tendon

of that muscle into the hip-joint; and an abscess beneath the quadriceps muscle in the thigh may find its way into the synovial cavity of the knee.

The textures around an abscess usually undergo absorption with readiness proportionate to the facility with which they yield to the pressure, and proportionate also to their vascularity and liability to inflammation. Thus fibrous tissues offer far more resistance to the progress of an abscess than muscles; and nerves and vessels often remain as prominent ridges or bands crossing the interior of an abscess. Bone, though offering great mechanical resistance, and by its support preventing the yielding and absorption of the textures intervening between it and the abscess, easily undergoes absorption when it is itself subject to the immediate influence of pressure. Hence the pus in an inflamed joint attended with destruction of the cartilages not unfrequently bores through the articular end of the bone, and makes its way into the medullary cavity of the shaft. The comparative facility with which absorption of bone may be induced, is well illustrated by specimens of aortic aneurisms, which by their pressure destroy the bodies of the vertebræ, but leave the intervertebral fibro-cartilages standing out in relief between them. Again, a fibrous tumour situated on the outside of the dura mater will make its way through the skull by inducing absorption of the bone, whereas if it grow from the interior of that membrane, it will project in the opposite direction, and, causing absorption of the cerebral convolutions, will become imbedded in the brain.

The attendant inflammation gives rise to the difference of the effects of abscesses, and of simple cysts or tumours upon the surrounding parts; the latter produce a mere mechanical impression, and the direction which they take depends solely upon the greater or less resistance of adjacent tissues. A fibrous tumour of the uterus, for instance, stretches the uterine tissue which becomes expanded over it, and it projects either into the abdominal cavity, or into the interior of the uterus, according as it happens to be situated near to the outer or the inner side of the wall of the organ. In either case it may become pendulous or polypous, and it does not commonly acquire adhesions to the surrounding parts. The progress of aneurisms is an illustration of the same point. The direction they take is regulated simply by the mechanical influence of the pressure of the blood in their interior, and the resistance offered by the surrounding parts, so that they burst, as an ordinary occurrence, into the adjacent serous cavities, or even into the loose cellular tissue which may happen to surround them. That such results rarely occur in the case of abscesses is, no doubt, owing to the accompanying inflammation, which by its adhesive effects unites the adjacent tissues, and seals up the internal cavities, and by its softening influences disposes the tissues to yield, and renders them more liable to absorption.

The symptoms of an abscess are in most instances sufficiently clear. The occurrence of a soft spot in the midst of an indurated inflammatory swelling, is a pretty sure sign of the formation of matter. The integuments over the soft spot generally become livid, and bulge in consequence of the pressure of the pus, and

the abscess is then said to point. When the fluid has accumulated in any considerable quantity, we may distinguish fluctuation by placing a finger upon one part, and suddenly pressing upon another.

There are, however, some circumstances which are likely to mislead, unless we be careful how we arrive at a decision, from the observation of this latter symptom. An effusion of serum caused by inflammation in a part where the tissue is loose, as in the back of the head, communicates to the finger an impression which is very likely to be mistaken for the fluctuation of fluid in a cavity. This source of error may sometimes be guarded against by carefully expressing the serum with the fingers before we attempt to ascertain the presence of fluctuation; but when the part is very tender, this cannot be done. A tumour of soft elastic structure, a moveable tumour, or an enlarged gland slipping under the skin, may all impart an impression resembling that of fluctuation. You will avoid many mistakes by following the rule of not deciding as to the sense of fluctuation with the fingers placed in a line transverse to the axis of a limb, for the muscles are easily displaced in that direction, and the impulse so occasioned may be mistaken for fluctuation. You may readily convince yourselves of this source of error by examining your own thigh, with the fingers placed as I have mentioned. If you then alter the position of the fingers, and place them one above the other in the long axis of the limb, you will be immediately sensible of the importance of attending to this simple rule.

The surgeon sometimes infers the presence of deep-seated matter, from the red or dusky colour, and the peculiar appearance of the skin, and indurated or oedematous condition of the superficial parts. This is more particularly the case in the perineum, and an incision under such circumstances frequently proves the correctness of the diagnosis, although no fluctuation may be felt.

We may suspect the formation of an abscess in the hinder part of the abdomen, or some other deep situation, when a patient who has been for some time ill, without presenting the well marked symptoms of any particular malady, begins to suffer repeated chills, followed by perspirations, occurring at irregular periods, and without any obvious cause.

The diagnosis of abscesses in different situations, from aneurisms, hernia, malignant tumours, and the like, I must leave to your own observation, advising you to take every opportunity of instructing yourselves in this very important department of practical study. Very little observation will assure you of its difficulty, and very much experience will be required to surmount it.

I must, in addition, add a word of caution regarding chronic abscess. Let the numerous mistakes with respect to them which have occurred in the practice of the most experienced surgeons warn you not to presume too much upon your own powers of discernment. They occasionally resemble adipose and other tumours so closely, that I am not acquainted with any signs by which they can with certainty be distinguished from them. The history, symptoms, and physical characters, are sometimes so precisely like those of a solid tumour, that I do not believe it possible,

in some cases, to form a diagnosis, without having recourse to the grooved needle. Some of you will remember the case of a woman who had a firm knotty tumour upon the muscles on the outside of the forearm, which presented all the usual characters of a solid tumour. It had been first observed when about as large as a pea, a year before we saw the case, and it had gradually increased in size, without pain. Its unusual situation for an adipose tumour, and the knowledge of our liability to errors of diagnosis in these cases, induced me to puncture it with a grooved needle before attempting its removal, when a drop of pus declared its nature, to the surprise of every one who had examined it.

I used to think the lobulated margin of a tumour, when present, to be a tolerably sure sign of its solid or adipose nature, but I have several times felt the irregular knotty induration around a chronic abscess so closely resembling the lobulated edge of a fatty tumour, that this symptom is certainly not to be relied on as a diagnostic feature. I can only advise you to be cautious in these doubtful cases, and not to despise the use of the grooved needle, which may occasionally save you from the annoying exposure of having removed an abscess under the impression that you were operating upon a solid tumour, and prevent your attempting an operation, which the adhesions of the abscess might render you unable to accomplish.

In the treatment of acute abscesses, our object is to effect the evacuation of the pus as quickly, and with as little mutilation of the body, as possible; in such a manner, too, as may best favour the subsidence of the inflammation, and the healing of the wound occasioned by the discharge of the pus. As soon as there is evidence of the presence of matter, we discontinue the measures intended to prevent its formation, and commonly apply a poultice, which, by its warmth and moisture, certainly has the effect of relieving the pain; and it probably also, to a certain extent, promotes suppuration, and facilitates the advance of the abscess to the surface, by softening the superficial parts, and causing them to yield more easily to the pressure of the pus.

I am not disposed to agree with those modern surgeons who would discard poultices as useless and filthy encumbrances. Neither water-dressing, spongipiline, or any of the new-fashioned substitutes (advantageous as they may be in some cases,) will adapt themselves so nicely to the surface, and afford so soft and comfortable an application to a tender and suppurating part, as a well-made poultice, which has the effect of assuaging the surrounding inflammation, while it facilitates the advance of the matter to the surface.

Then, with regard to the propriety of opening abscesses in various circumstances, you will find much difference of opinion. We will first consider the case of a simple acute abscess, without reference to its situation. I believe, *ceteris paribus*, that it is the better plan to leave such an abscess to take its course till it has approached very near to the surface, for two chief reasons; first, because the formation of matter seems to be in some way or other a relief to the inflammation, which usually becomes more limited in its extent as

soon as suppuration commences; and in the course of the suppuration, the induration which preceded it becomes greatly diminished, either from the absorption of the effused lymph caused by the pressure of the accumulating pus upon it, or in consequence of its undergoing solution, and becoming mingled with the contents of the abscess. There can, I think, be no doubt, that if an abscess be opened early, the process of suppuration does not proceed so freely, the inflammation and induration remain longer, and the healing of the wound is more slowly accomplished. For the same reason, if, in the case of inflamed glands, as bubo, the pus formed at one spot be too early evacuated, the swelling and induration of the surrounding glands is more tedious, and there is greater liability to the occurrence of successive suppurations in them, than if the primary abscess be permitted to form well, and be opened later, or allowed to burst spontaneously. I believe that this remark may be applied in like manner to the treatment of boils, and that I am correct in saying, not only that the first boil will heal more quickly, but that the chance of the occurrence of others is lessened, if it be allowed to suppurate fairly, and to burst spontaneously.

Secondly. The natural advance of an abscess to the surface, by the extension and thinning of the superjacent structures, is such as to afford an easy and direct exit to the pus when it bursts; whereas, if an opening be made into a deep abscess, through the thick covering of soft parts, the artificial channel is long, is narrow in its whole length, is very likely to become obstructed, and the discharge of the pus being consequently impeded, the contraction and healing of the abscess is slow and difficult.

As a general rule, therefore, it may be stated, that an abscess will discharge its contents more easily, and will close better, if it be allowed to burst, or be not opened till it has approached the skin. I make this limitation, because a timely incision through the skin will often prevent extensive undermining and destruction of integuments, or the formation of sinuses, enduring for months, requiring, perhaps, painful incisions for their cure, and followed by ugly sores. I wish to be clearly understood upon this point, for though I object to the opening of deep abscesses, unless some particular circumstances render it desirable, I am fully sensible of the great advantages that are often gained by incisions through the integuments, before they have become much thinned, discoloured, or otherwise altered by inflammation. The bad results of too long delay in opening abscesses are in no cases more apparent than in buboes. I am certain that the troublesome sinuses we are so often called upon to treat as a consequence of buboes, might, in by far the greater number of cases, be prevented by a timely incision through the integuments, before they have become undermined, and their vitality has in consequence been impaired. You have need to beware, therefore, in avoiding the error of opening an abscess too early, that you do not fall into the opposite extreme of delaying the incision too late.

I have intimated that particular circumstances may exist which would induce us to deviate from the rule

of leaving an abscess to approach the surface. Such are severe pains occasioned by the pressure of the pus, or injury to important parts likely to result during the time required for the progress of the abscess to the surface in the natural manner. A man may die from the pressure of an abscess upon his trachea before the legitimate period for opening has arrived. An abscess situated in loose cellular tissue, as in the axilla, or about the rectum, will be likely to burrow about and leave extensive troublesome sinuses, unless it be opened early; or an abscess may be so deep, and covered by structures of such density, that it cannot easily make its way to the surface, and may, in consequence, spread from one part of a limb to another, and may even burst into an internal cavity, the pleural, peritoneal, or the knee joint.

There are, besides, many cases in which the presence of the pus evidently exerts a powerful irritating influence maintaining and causing an extension of the inflammation. This happens more particularly when the pus has any peculiar qualities, as in the case of a poisoned wound, or when it is the result of very acute inflammation; or where its formation is not preceded by the adhesive stage of inflammation, and it therefore spreads from cell to cell of the areolar tissue, as in phlegmonous erysipelas; where it is situated among dense unyielding textures, as in the palm of the hand, or in textures richly supplied with blood-vessels and nerves. In all these cases, and in others of like kind, the importance of early incisions (of incisions made as soon as there is any evidence of the presence of matter) cannot be too strongly enforced, and the good effect of the free evacuation of pus will be apparent from the immediate subsidence of the surrounding inflammation.

Having determined on opening an abscess, you will do well to select for your incision the spot at which there is a disposition to point, if any such be shown, because the pus will escape in this situation more easily than in any other, and the textures intervening between the abscess and the surface are probably thinner there than in other parts. If this be a depending spot, so much the better; if it be not, I would be unwilling to neglect the hint which nature gives as to the point of selection, for the mere sake of securing a depending opening; for, if you do this, the abscess will probably burst after all at the pointing spot, and the free discharge of its contents will not take place till it has done so. I remember a lad who was suffering very severe pain from a large deep-seated acute abscess in the thigh, which was just beginning to point on the inside of the limb above the knee-joint. It being thought advisable to open the abscess on account of its proximity to the joint, and the great distress occasioned by it, an incision was made on the outside of the thigh for fear of injuring the femoral vessels. The incision seemed to be sufficiently free, and a considerable quantity of pus escaped, but it did not continue to flow freely through the wound; it collected again in the cavity of the abscess, and the lad obtained very little relief till a few days afterwards, when the abscess burst at the spot where it had begun to point, and a free discharge of matter ensued, affording immediate and permanent ease.

The incision into an abscess should be free, taking such direction as least endangers the superficial vessels and nerves which generally run parallel to the long axis of the limb, and the pus should be allowed to flow in a continuous stream through the wound as it is expressed by the contraction of the sides of the abscess. The orifice is thus kept open, and the re-union of its edges prevented. If the matter be all squeezed out when the opening is first made, its further flow is of course suspended till it has reaccumulated to a certain extent in the cavity of the abscess, and in the meantime, the edges of the incision falling into contact, are likely to unite together, and a second incision may be needed.

The application of *potassa fusa* as a means of opening an abscess, should only be resorted to when the case has been neglected too long, and the integuments have become so undermined, that they are not likely to heal if the matter be evacuated in the ordinary manner.

When the opening, natural or artificial, has been made, the formation and discharge of pus continues for a certain period, the surrounding induration gradually disappears, the cavity of the abscess is diminished by the contraction of its walls, which ultimately come into contact, and adhere together, healing like any other wound. The lymph of which they are composed continues to contract, and the only trace of the abscess at last remaining may be a mere puckering of the surrounding structures around a more or less opaque star-like cicatrix.

Many circumstances may occur to interfere with this speedy healing of the abscess. Not unfrequently the apposition and union of its walls are prevented by the formation and discharge of pus, which may be maintained for a long period by a piece of carious bone or a diseased gland at the further end of it; or, there may be a flow through it of some secretion, (the urine, tears, or saliva,) consequent on a communication which has taken place with the duct of a gland. The track of an abscess thus kept open is called a sinus or fistula, and the lining membrane in course of time assumes a firm texture, with smooth surface like that of a mucous membrane in which the healing processes are not very easily excited, although the cause of the persistence of the fistula be removed. One of the most common causes of the continuance of a sinus is the undermined blue or livid condition of the integuments covering it, which show more disposition to ulcerate or mortify than to assist in carrying on the healing processes, and such sinuses will remain for months, unless the integuments be divided or destroyed and the canal reduced to an ulcer, from the margins of which cicatrization may proceed in the usual manner.

The closure of an abscess may fail to take place in consequence of great languor and inactivity of the healing processes, which is likely to happen in the case of chronic abscesses and in delicate scrofulous persons, or when the walls of an old abscess have become thick and indurated so that their contraction and the closure of the cavity occurs only in a partial manner. Fistulæ resulting from the former of these causes may be sometimes induced to heal by measures tending to

invigorate the system, and by local stimulating applications. The indurated callous fistulæ remaining after the opening of old abscesses, are most easily remedied by extirpation with the knife, or caustic, if that can be done.

The continual free movements to which the parts are subjected are the cause of the persistence of fistula in the loose tissue of the axilla, ham, and the neighbourhood of the anus. I believe that fistulæ, occurring in the latter situation, generally originate in abscesses formed on the outside of the rectum, and that the communication with the bowel takes place after the abscess has burst externally. More rarely the abscess bursts into the rectum, and the blind fistula, as it is called, so formed, subsequently makes its way externally. In the greater number of recent fistulæ opening beside the anus, no communication with the bowel exists; but in the majority of fistulæ of long standing, an opening into the rectum will be found at some point or other, generally near the upper margin of the internal sphincter. I am aware that these remarks do not quite accord with the statements of some surgical authorities of very high reputation, but they are made after the examination of a considerable number of cases, the records of which I have for the most part preserved. The treatment in these cases corresponds with that of subcutaneous fistulæ, the only difference being that the sinuses are laid open into the bowel in the one case, and the integuments are divided in the other.

CLINICAL LECTURE ON ALBUMINURIA.*

DELIVERED IN THE

LEEDS PUBLIC DISPENSARY.

By J. D. HEATON, M.D., Senior Physician to the Dispensary.

Thomas Stockdale, aged 20, a shoemaker, of middle stature, leuco-phlegmatic complexion, rather stoutly made, and of regular habits. He caught cold a fortnight before admission, from wearing wet shoes, after which he felt pains all over, and in the back, and began to swell.

May 29th. I first saw him this day, and found him generally anasarctic; much pain in the loins, especially in an afternoon; urine scanty, of a cherry-red colour, depositing a red precipitate of the colour of blood, alkaline, and very albuminous; tongue white, red at the tip; pulse 90, full, rather sharp. He was ordered to be bled to eight ounces, and afterwards to have a warm bath.

R. Inf. Diosmæ, oz. viij.; Tinct. Digitalis, dr. iss. M. Sumat, oz. j., ter die. R. Pulv. Ipecac. Co., gr. x.; Hydrarg. Chloridi, gr. ij. M. Fiat pulvis omni nocte sumendus. Omni mane sumat Potassæ Bitart., dr. ij.

31st. Unfortunately the blood was not kept, so that its appearance cannot be noted. He perspired a good deal after the bath, but rested ill during the night.

Yesterday he had much pain in the loins, especially on the left side. This morning he feels better; the body is less swelled; he has less pain; he makes more water, which is less bloody; the tongue appears as before; the bowels have been freely opened; pulse 30, full. Ordered to be cupped in the loins, to have a warm bath each evening, and to continue the medicines.

June 1st. There has been no pain in the back since he was cupped; he is less dropsical; the urine is more abundant, and paler, still muddy, and depositing a red sediment; slightly alkaline; highly charged with albumen, though less so than when first examined. The tongue is no cleaner, but the pulse is less full.

June 5th. Since last report he has been visited by one of the resident officers of the Dispensary, and the mixture changed for a stimulating diuretic, containing compound spirits of juniper, and tincture of squills. He has made more water, and is less swollen, and has had no pain in the loins, but the urine is more highly coloured, of a dirty red, and very thick. He had a restless night; the pulse is rather frequent; gums slightly affected with the mercurial; bowels freely opened. To continue the cream of tartar each morning, and the Dover's powder at night, but without the calomel. *Addē misturæ Liq. Potassæ, dr. iss.* From this time he gradually improved.

June 26th. To day he came to the Dispensary. He considers himself almost well. There is no œdema, except slightly about the ankles; he has no pain in the loins, or elsewhere; his strength and appetite are returning; pulse natural; tongue still rather white. Urine has a natural appearance, but still slightly clouded, on the addition of nitric acid.

July 17th. Wishes to be discharged, as he feels quite well. There is no œdema; the urine is of average quantity, specific gravity 1012, very slightly clouded by nitric acid.—Discharged.

After being discharged from the books I had still opportunities of occasionally seeing this man. I ascertained that the urine returned to a perfectly natural state, and he has continued in health up to the present time. In anticipation of this lecture I have had the urine tested, and it is now quite natural and free from albumen.

I shall next give a brief sketch of a case of acute albuminuria, which terminated fatally. It did not fall under my treatment, nor occur in this institution, but in University College, London, some years ago now, when I was clinical clerk there, and was reported by myself, in the *Medical Gazette*, more at large, with several other cases of albuminuria, which were treated in the same hospital. I mention it here as being a good instance of this form of disease.

Joseph Wilson, admitted June 7th, a house-painter, aged 45, married, of regular habits; general health has been good. About a month since he caught cold, and was laid up for a few days. When recovering from this, a day or two after he had returned to his work, his feet began to swell, and the scrotum and penis became much distended with fluid. The swelling increased, so that he was unable to work, and he

became very weak and languid, but without pain. The urine was more scanty than usual, high-coloured, but, he says, not turbid. He had medical advice, and took very strong purgatives, and was afterwards salivated, but the swelling only increased. Whilst under the action of mercury, he again caught a severe cold, which caused dyspnoea and cough, with much expectoration, the sputa being streaked with blood, though he has not had symptoms of pulmonary disease at any time previously. Two days before admission he was seized with a sharp pain, shooting from the right shoulder to the sternum.

At present the whole body is anasarcaous; the respiration is short and hurried; he has some dyspnoea and cough, but not very troublesome; decubitus on the right side; the pain in the right side of the chest continues; it is increased by cough, or a deep respiration; tongue brown, with a tendency to dryness; gums mercurialized; bowels relaxed; no tenderness of the abdomen; pulse small and frequent; urine scanty, turbid, high-coloured, very albuminous, specific gravity, 1032. Physical examination of the chest detects a considerable quantity of fluid in the right side, (there being complete dullness of stroke-sound up to a level varying with the position of the patient, and ægophony at the inferior angle of the right scapula,) which presents very slight respiratory movements, respiration being carried on chiefly by the left side. Sounds of the heart natural.

Lateri dextro appl. Empl. Cantharidis. R. Pil. Hydrarg., gr. iij.; Ext. Hyoscyami, gr. ij; Pulv. Scillæ, gr. j. M. Fiat pil. ter die sumenda. Bibat potum Potas. Bitartr. ad libitum.

8th. No great change in the symptoms. Cont. Pil. R. Tinct. Cantharidis, m. x.; Liq. Potas., m. xx.; Sp. Æther. Nit., dr. j.; Mist. Camph., oz. j. M. Fiat haust. ter die sumendus.

10th. The patient seems worse; severe pain down the right side of the chest and abdomen, increased by any movement; respiration short and frequent, chiefly abdominal; thirst; anorexia; much diarrhoea; tongue brown and adhesive; urine as before; not above three to four ounces passed in the twenty-four hours. Pulse 100, small and feeble. Fiat venesectio ad oz. xij. sang. Foventur abdomen.

11th. The quantity of blood ordered was obtained with difficulty; coagulum moderately firm, but neither cupped nor buffed. The patient feels better; the pain is relieved; tongue rather moist; diarrhoea continues; urine not increased in quantity. In the afternoon a friction-sound was heard under the right clavicle, where he had more pain, and the pulse became sharp and more frequent. Parti dolenti admov. Hirudines xij.; Auge Tinct. Cantharidis ad m. xv.

12th. The symptoms as before, but aggravated; no increase in the quantity of urine. R. Decocti. Scoparii Co., oz. iv.; Potas. Nitrat., gr. x.; Sp. Æther. Nitr., dr. j.; Sodæ Sesqui-Carb., gr. x. M. Fat haust, ter die sumendus.

15th. Has seemed better the last two days; the pain is much relieved; he can lie on the right side without uneasiness, and prefers this, as the respiration is then

easier; cough troublesome; the sputa have the rusty tint of pneumonia, but no crepitation has been detected in the chest; tongue moist; pulse rather less feeble; but the urine is scarcely increased in quantity; the diarrhoea continues. R. Pulv. Antimon., gr. iij.; Pulv. Ipecac. Co., gr. vj. M. Fiat pulvis omni nocte sumendus.

18th. No very marked change in the symptoms; there seems increasing prostration, but he thinks himself no worse; the diarrhoea is abated; the urine is more dark coloured, and not increased in quantity, specific gravity 1021; the right side of the chest is still distended with fluid. E lateri dextro capt sang., oz. viij., ope c. c.

19th. Increasing debility; voice whispering; mind confused; drowsiness, but no sleep; no headache; stools passed involuntarily; great oedema of all parts of the surface; the wound of venesection in the arm has never healed, it is now an open, unhealthy-looking ulcer; urine not increased in quantity, very dark-coloured, no precipitate on boiling, but copious flakes of albumen precipitated on adding nitric acid. Adde Haust. Potas. Acetatis, dr. ss.

21st. Tongue dry and brown; pulse 120, scarcely perceptible; stools and urine passed involuntarily; mind confused. He died in the evening.

A *post-mortem* examination was made fifteen hours after death. On opening the thorax a large quantity of serum, three or four pints, was discharged, containing flakes of yellowish, opaque lymph; this fluid was chiefly contained in the right cavity of the chest, but partly also in the left. The surfaces of the pleura exhibited much inflammatory vascularity, and were covered with similar flakes; and there were recent soft adhesions between the diaphragm and the right lung. The right lung contained miliary granulations scattered throughout its substance, but chiefly in the upper lobe; its whole substance was congested, more solid, and less crepitant than natural. The lower lobe was the seat of lobular inflammation, in distinctly circumscribed patches, which were completely carnified, and of a florid red colour, the rest of the lung presenting a dark purple colour, on the surface of a section. The left lung had some old adhesions posteriorly to the walls of the chest: it was much congested, soft, and lacerable, but crepitant throughout; there was a small tubercular cavity in the upper lobe, which was of old standing, and had its walls contracted. The lining membrane of the bronchial tubes in both lungs presented considerable vascular injection; and in the right lung the longitudinal fibres of the tubes were remarkably hypertrophied. The heart was healthy. A considerable amount of clear serum was contained in the pericardium. The right kidney was larger than natural, soft and flabby; on stripping off the capsule, portions of the substance of the kidney tore off with it; the surface was then seen of a faded, brownish-yellow colour, with here and there patches of a lighter colour, which, on laying open the kidney, were seen to extend through the thickness of the cortical structure. The whole substance of the kidney was of the same pale colour; the section of the cortical substance was finely granulated, and was

variegated with star-like spots, of bright red vascularity. This kidney weighed five ounces and a half. The left kidney was considerably larger than the right, and more soft and lacerable; it had the same colour as the right kidney, and was similarly interspersed with albuminous patches; the granulations were larger, and extended more deeply, and the spots of vascularity were more marked. It weighed seven ounces. The other abdominal organs presented no very marked appearances. The peritoneal cavity contained a considerable amount of clear serum.

In the case of Stockdale, we have an acute attack apparently unprecedented by any previous disease of the kidneys. Cases of this kind are frequently called inflammatory dropsy, but their connection with disease of the kidney, and a consequently albuminous state of the urine, is now fully recognized. They much resemble those cases of anasarca occurring after scarlatina, usually from too early an exposure to cold, and of which most epidemics of this latter disorder furnish us with several examples, especially those which occur during a cold bleak condition of the atmosphere. Although this is a very serious affection, and may terminate fatally, either in the acute stage, as we shall see in the next case, or more tardily by passing into a chronic state, yet, as there was no reason in this instance for supposing the structure of the kidney to be as yet materially deteriorated, the prognosis was in this respect more favourable.

The case was ushered in by the usual symptoms of inflammatory fever, and then the body began to swell. Frequently the dropsy appears in the upper parts of the body, and in the face, as clearly as in other parts, and this circumstance alone might lead us to suspect the true nature of the dropsy. The serous effusion in such cases as we are considering, depends upon some changed condition of the blood and of the circulation, affecting the whole body; the cutaneous perspiration has been, perhaps suddenly, arrested from exposure to cold; this of itself allows more water than is right to accumulate in the blood, and, as at the same time, the kidneys become congested,—the effect of the same exposure being to cause the blood to accumulate in internal organs,—they take on a diseased action, and become incapable of secreting the proper amount of urine; from *this* cause, likewise, the blood-vessels become the more distended, and, with the accompanying fever, the heart's action is increased, forcing the blood more powerfully into the already over-charged vessels, which, thus subjected to such undue pressure, at length allow the watery parts to exude through their coats, and the cellular tissue of all parts, even the more elevated, as the face, in which it is most apparent, becomes suddenly infiltrated. But where serous effusions depend upon more local causes, as mechanical obstructions to the circulation, or are merely of a passive nature, as when consequent upon a thin, watery, state of the blood, but without any general plethora of the vessels, the oedema is more local, or appears first in more depending situations, where the hydrostatic pressure of the blood upon the vessels is greatest, and to which, likewise, the

serous exudation naturally tends to gravitate through the cellular tissue. In the acute form, likewise, the dropsical parts often have a tense feel, and will not readily *pit*, for the cellular tissue having become more suddenly distended, does not immediately accustom itself to yield, and allow the serum to escape and pass easily through its areolæ when subjected to pressure.

Whenever the symptom of dropsy presents itself, we are led to make an early enquiry into the condition of the urine; and in such cases as we are considering, we shall find it presenting the characters which have been stated in the report. Any considerable reduction in the quantity of the urine will render it turbid with a deposit of lithate of ammonia, which, being not very soluble, the reduced quantity of the watery solvent cannot now retain in solution. This precipitate is itself more or less pink in most cases, being in combination with a colouring matter contained in the urine; but when the vessels of the kidney are much distended with blood, not merely the serous part of the blood may pass into the urine, rendering it albuminous, but some of the red particles, likewise, giving a more decidedly red colour to the urine, in which they may be detected under the microscope. Such urine may be either alkaline as it is voided, or may speedily pass into an alkaline state, from the conversion of the urea into carbonate of ammonia; but in *chronic* cases of this disease, when the aqueous constituent of the urine is passed in excessive quantities, but of a very low specific gravity, and containing little urea or other animal principles, it decomposes slowly, so that any slight acidity it originally possesses is long retained. It should be borne in mind that an alkaline state of the urine interferes with one of the ordinary tests for albumen, preventing that principle from coagulating by heat; the urine should therefore be tested likewise with nitric acid. Occasionally we find urine which, when boiled, acquires an opalescence which is not removed on adding any mineral acid, which therefore cannot be occasioned by a phosphatic deposit, but in which nitric acid produces no change; this is probably occasioned by some protein compound similar to albumen, and affording similar pathological indications, but differing from the chemical characters of albumen in this respect. Perhaps a solution of bichloride of mercury is the most certain test for albumen, or its modifications, but it is more liable to fallacy than the other two I have mentioned, as it will occasion precipitates with other principles besides albumen which the urine may contain. Another caution in testing for albumen, which I think may sometimes be of value, is, that when the quantity of albumen is small, if the urine be allowed to become old before it is tested, it may become so far decomposed as no longer to answer the tests for albumen, though it might have given decided indications if examined when fresh. Probably some of the instances, where one test will produce the characteristic effect, though another fails, may be explained in this way.

The treatment was similar to that of the former cases, but here more active, corresponding with the greater activity and urgency of the symptoms. The state of the general circulation, together with local

symptoms of hyperæmia in the kidneys warranted a moderate bleeding in the arm, followed by cupping to the loins. If this depleting treatment produces its desired effect, we soon see the result in the urine, which becomes more copious and less albuminous; but I am opposed to very profuse bleeding in this complaint, for it must be borne in mind that there is some defect in the blood, which is shown by the deposit of lymph of a bad quality in the kidneys, and the loss of much blood will still further weaken and deteriorate its quality. In addition to this, some of the more sedative, and less stimulating diuretics were ordered, and the bowels were acted on. It is important likewise to promote a free cutaneous secretion, which is usually very deficient in this complaint, by which we shall further derive from the more deeply-seated vessels to the surface, and so still further relieve the congestion of internal organs. For this purpose warm baths are very serviceable, together with other sudorific treatment. Dover's powders combined with calomel was prescribed for this purpose. I gave mercury in this case merely as an antiphlogistic, and to counteract the constringing effect of the opium. For the same reason that I should think it desirable to bleed largely, I should think it injurious to bring the system fully under the influence of mercury. I feel sure that in some cases where I have seen mercury given freely and for a considerable time, the disease has been aggravated, and the fatal termination brought on more speedily by this treatment. I think this was very probably so with respect to Wilson, the next case, who had been salivated before admission to the hospital, by which, probably, the progress of the disease was accelerated.

In respect of diet, besides the propriety of the antiphlogistic regimen in these cases, as indicated by the febrile and inflammatory symptoms, perhaps a farinaceous diet may be preferable to any animal food during the imperfect excretion of the urinary principles by the kidneys, as being less favourable to the free formation of those nitrogenous compounds; this, however, could only act indirectly, as we do not suppose these excrementitious matters to be formed in the blood from the food, but by the conversion of the effete tissues.

By these methods which I have specified, the improvement was quite satisfactory; the pain in the loins and the fever subsided, the urine assumed a more natural character, and the serous effusion was gradually reabsorbed. I think some more tonic treatment was adopted subsequently, though I have not the particulars of this. The patient was dismissed sooner than was quite prudent, by his own wish. Fortunately no bad consequences followed: and that the cure is complete and permanent is satisfactorily shown by the long time (three years) of continued good health, which he has since experienced, and by the urine being, as I have ascertained, in a perfectly normal state at the present time. But even where the recovery is so complete as in this case, probably some predisposition is left to the disease, to which any neglect of proper hygienic precautions may add the exciting cause. Any bad lymph which has been deposited in the tissue of the kidneys before the arrest of the disease, must

remain, and may probably be incapable of gradual removal by the absorbents; in proportion as lymph is less unhealthy—less organizable, is it less capable of reabsorption. This may remain in a quiescent state, and the kidneys may retain a sufficient amount of healthy structure to perform efficiently their proper function. But this morbid deposit must give a proclivity to a return of the condition by which it was produced, both by interfering with the uniform and regular circulation in the part, and so favouring local congestion, and by acting as a nucleus around which fresh morbid deposit of like nature might be then aggregated.

I have taken the last of the cases which I read to you, because it gives a better instance of the fatal termination and *post-mortem* appearances of acute albuminuria than any I could find in our own reports. As the case was not under my own care I shall make no observations on the treatment, especially as the former cases have afforded opportunities for noticing that which I find most successful, and the principles upon which it is founded. The attack seems to have commenced with exposure to cold. At the time of his admission, the symptoms of the albuminuria were similar to what we have seen in the former case; but there were also those of bronchitis, which from the appearance of the blood in the sputa might be supposed to be connected with tubercles, but the effusion of serum into the chest must have so far altered both the character and the signification of the physical signs, that this opinion might not be capable of exact confirmation. The fluid detected in the right side of the chest might have been supposed to be merely a part of the general anasarca; but the pain which accompanied it seemed inflammatory, and on a subsequent examination, a friction sound was heard at one point; besides which, a mere dropsical effusion would not have been confined to one side of the chest as was this. These inflammations in the chest refused to yield to the treatment, nor could the function of the kidney be restored. The urine did not increase in quantity; it was only from three ounces to four ounces per diem; whereas, the average quantity of health is upwards of two pints. And in this small amount of fluid, even though of a density above the healthy standard, being 1032, instead of about 1020, it is evident much less than the natural amount of the principles proper to the urine must be excreted from the blood. These, therefore, must have accumulated in the blood, where, if retained, they prove as poisonous as other noxious principles might if introduced from without. When the system is suddenly subjected to this injurious influence, as by an acute attack, it suffers much more, and more speedily, than when the poison more slowly accumulates in the chronic form of the disease; for in the latter we frequently find the urine for a length of time to be voided having a specific gravity little above that of pure water, which must leave the blood in a very impure state; and yet such patients having been gradually habituated to this condition, suffer no very urgent inconvenience. The same is true with respect to other excretions: if the respiration of a healthy man

be suddenly obstructed by an attack of asthma, or by acute laryngitis, he suffers most distressing dyspnoea, or dies asphyxiated—poisoned by carbon retained in the blood; but he may become habituated to a serious diminution of the respiratory function by chronic emphysema, with much less inconvenience. So, again, with regard to the secretion of the liver; a sudden suppression of bile causes speedy death with comatose symptoms; but there are instances where the common biliary duct has been permanently closed for a length of time, and the secreting structure of the liver atrophied, and yet the patient has not been poisoned by bile, but died gradually of inanition. Dr. Budd relates an interesting case of this kind in his work on diseases of the liver.

To the unhealthy condition of the blood we must attribute the low form of the inflammation occurring in the chest, lingering on without very active symptoms, and yet not amenable to treatment; and to the same cause, its inability to pour out healthy lymph to heal the small wound caused by the lancet, which, consequently, degenerated into an unhealthy sore.

No means that were used succeeded in arousing the kidneys to a more efficient performance of their function; they only became more inactive, although the quantity of urine, by measure, was not increased, the specific gravity fell, shewing that less and less of the essential constituents of the urine was separated from the blood. Had the suppression been somewhat more complete, it would have constituted a case of ischuria renalis, or suppression of urine, where death is speedily inflicted by the poison of the urinary principles retained in the blood. In such cases comatose symptoms precede and usher in the fatal event. There was some mental confusion and drowsiness towards the termination of the case, but no fatal coma presented itself; we cannot therefore attribute the death solely to this cause, but to this, combined with other injurious influences,—the inflammations in the chest, and the consequent dyspnoea; also the prostration consequent upon anorexia and continued diarrhoea.

In the *post-mortem* examination we have chiefly to notice the appearance of the lungs and the kidneys. The fluid contained in the pleura was not merely a serous effusion; flakes of yellowish opaque lymph, evidently the product of inflammation, were floating in it, and the same material was spread over the surfaces of the pleura. I would draw your attention to the yellowness and opacity of this lymph, differing from the paler more semi-transparent lymph, the result of acute inflammation, occurring in a healthy person, as showing that caco-plastic condition of the blood, which I consider the immediate cause of granular degeneration of the kidneys. There were also the marks of recent inflammation of the substance of the lung, being of that form which is called *lobular pneumonia*, in which the inflammation is limited to circumscribed patches. Dr. Williams (see "Cyclop. of Med." Art. "Pneumonia,") has pointed out that this form of pneumonia frequently occurs when there is much serous effusion on the surface of the lung; and the

consolidated or carnified state of the inflamed parts presenting the solidity of flesh, and without the granular appearance usually seen in pneumonia, is evidently likewise due to the pressure of the fluid in the chest, upon tissue infiltrated with adhesive lymph. The physical signs of pneumonia had been recognized only in the right lung, during life, but the marks of recent inflammation were likewise found diffused through the substance of the left, which was in the condition described by Laennec as engorgement or the first stage of pneumonia. Probably this state supervened very recently before death, caused, indeed, by the moribund state, being the *pneumonia agonizantium* of Laennec. There was some degree of tubercular disease in the lungs, which I notice is itself a mark of an imperfect state of the blood, similar to that which I consider the immediate cause of granular disease in the kidneys.

When we turn to the kidneys, we find them both larger than natural, but paler; not, therefore, at the time of death distended with blood, though, could we have examined them at the commencement of the disease, most probably we should have found them highly congested. As the kidneys were not enlarged by the blood they contained, we must suppose some morbid deposit; and this was evident enough upon examination, being the cause of the pale faded colour of the whole mass of these organs, and being likewise accumulated in patches of a still lighter tint. It was of a friable consistence, so that fragments were torn off attached to the capsule, which peels off quite clean from the healthy kidney. It is in this interstitial deposit that granular degeneration essentially consists; it is of the nature of lymph, the material of textural nutrition, or that which is poured out in excess from an inflamed part, only that here the lymph is not of a good quality; it cannot become fully organized, or if poured out in excess, it cannot be readily absorbed. When the blood is in that unhealthy condition to be capable of furnishing only this bad lymph, it may be deposited wherever inflammation occurs, or without inflammation, by deprivation of the ordinary nutritive process. Thus we may have granular degeneration commencing suddenly with symptoms of inflammation, or invading insidiously without any active symptoms. Dr. Copland, taking a similar view of the pathological nature of this disease—albuminuria, calls it “cachectic inflammation of the kidney,” an appropriate name for the acute form, but not applicable to all the more chronic cases, if I am right in considering that these may occur without any inflammation of the kidney.

This morbid deposit, whilst it is still recent, occasions an enlarged and flabby condition of the organ, chiefly affecting the cortical part, which is thus rendered broader than natural, but subsequently contracting, so as to render the kidney small and dense, and ultimately, in chronic cases, causing atrophy of the proper tissue, by the pressure to which it is subjected. I have seen the kidney of a person who died of the chronic disease reduced to the weight of one ounce, which is less than a quarter of its average weight. I have, in a former lecture,* pointed out the analogy between cirrhosis

of the liver and this disease of the kidneys. These diseases have much analogy likewise, as Dr. C. J. B. Williams has pointed out, with others of a serofulous or tubercular nature, in which we have a deposit of lymph in the substance of organs or tissues, more or less incapable of organization, invading the proper structure of the part, and frequently by its own tendency to contract and harden, shrivelling up and indurating the parts which it attacks. The grey induration of the lungs, which is considered as one form of tubercular disease, is an instance of this kind.

Other explanations have been given of the nature of this disease. Recently it has been represented as a fatty degeneration of the kidney, similar to that by which the liver is occasionally attacked. But I do not think this view satisfactory. The granular kidney has not the greasy feel or appearance which the fat liver presents; neither would a deposition of fat have a tendency afterwards to contract, and cause the atrophy of the organ in which it took place; the fat liver goes on increasing throughout its course. I think also there are many objections to the theory of this view of the pathology of the granular kidney, but we have not time to examine these in the present lecture.

OBSERVATIONS ON ASIATIC CHOLERA.

By T. L. WALFORD, M.R.C.S., Reading.

(Read at the Reading Pathological Society, Sept. 13, 1848.)

Mr. President,—In taking part in the consideration of this important question,—viz., the nature, seat, and treatment of the disease termed Asiatic cholera, it appears to me highly desirable to obtain definite views, if possible, of so dire a malady, so as to enable one to grapple with it under the most favourable circumstances; and as there are contained in Dr. Fletcher's posthumous work on “General Pathology,” views of this disease, such as we are seeking, and which to my judgment are no less correct than they are definite, I feel that I shall not be doing violence to the rules of this Society, by endeavouring to state them as I gather them from his work.

As to the origin of that which is the cause, the exciting cause of this disease, (call it a poison if you will,) there will be little hesitation, I apprehend, in believing it to be of a malarious origin; not in the sense of its being the result of chemical decomposition, occurring either in decaying vegetable matter or animal refuse, but rather a diseased vegetable secretion. In the language of Dr. Fletcher, (page 71,) “contagious and infectious miasms consist of combinations of principles, to the production of which organized beings, animal or vegetable, alone are adequate;” “and that it is not to this or that individual principle, but to the peculiar combination of them all, which can be effected in no other way than by secretion, that their pernicious effects are to be ascribed.”

The question whether the poison be absorbed into the blood, so as to constitute a “blood disease,” appears to me so untenable, that it seems preferable to omit

* See *Provincial Med. and Surg. Jour.* for 1848, p. 509.

the consideration of it, merely quoting the words of Dr. Fletcher,—“Whether absorbed or not, (and there is no question that they frequently are absorbed,) their action is still upon the irritable solids alone; and the only difference is, that when absorbed, the blood is made subservient to the diffusion of the exciting cause, of which it may be represented therefore as constituting a part; whereas, when not absorbed, the action of such exciting causes can be diffused only in the manner of sympathy; and we do not despair of being able to prove, or at least to render it highly probable, that the latter is by far the most common manner in which their action is extended.”—Page 48. See also pages 38 &c., 72 &c., and 99 and following.

Believing then, that the poison produces its effects upon certain solids of the body rather than upon others, we come to the question, where is the disease situated? Here I apprehend we can agree to a great extent in saying where it is not. We shall not hesitate to exclude the brain, the lungs and heart, the stomach and kidneys, from being primarily the seat of the effects of the poison, and that the manner in which these organs are affected is secondarily. If, by chemistry, we could prove that the discharge from the bowels had nothing of vitiated bile in it, we might with good reason locate the disease in the intestinal canal; but as that cannot be affirmed, the question to be considered is, whether it be a disease of the bowels or of the liver? and I think the balance of the evidence is most decidedly in favour of the latter. Under the head of etiology, at page 249, Dr. Fletcher, speaking of glandular secretions, says,—“The bile, instead of being opaque, viscid, and of a yellowish brown colour, is sometimes, as in cholera, semi-transparent, thin, and of a dirty straw colour,—changes which are attributed by Orfila chiefly to a vitiation of its resin.” “So much indeed has the bile been altered in this disease, that it has even been questioned whether it be bile at all, and not rather a vitiated secretion from the intestines.” “In modern times, also, it has been generally noticed, that an evacuation of pure bile is one of the best symptoms in cholera, and generally indicates recovery. But what does this shew, except that the disease is diminished; so that what was previously vitiated is now natural. We may as well question that the mucus in catarrh or gonorrhœa is mucus, or the urine in diabetes is urine, as that the bile in cholera is bile, since it is not a whit more changed than these; and there seems to be a regular gradation in the changes which it undergoes, in proportion to the severity of the disease, from the common autumnal cholera of this country, to the most violent degree of the Indian epidemics.”

At page 252, Dr. Fletcher observes, “That the proper secretion of any gland takes place at the *radicles* alone of the ducts of which such a gland is essentially composed, consequently that it is only when such radicles are the seat of inflammation that such proper secretion is increased. Hence it is easy to explain the apparent anomaly, that in a proper hepatitis we have not cholera;—in a proper inflammation of the pancreas no pyrosis;—in a proper nephritis no diabetes;—and in cynanche parotidea no pyalism: so far from it, there is a suppression, to a greater or less degree, of the proper secretion of the gland. But this supports the doctrine, that secretion is always increased by inflammation, for the seat is now the mucous membrane

of the ducts, and the increased secretion and swelling in them produces obstruction to the proper secretion of the gland, and thus gives rise to its suppression.” It will thus be seen, that cholera, in the opinion of Dr. Fletcher, is an inflammation of the secreting portion of the liver, and in proof of the correctness of that opinion, I would observe, that in proportion as we succeed in restoring a healthy secretion of bile, are we successful in treating the disease? Again, what means have been followed by the largest amount of success, small though that may be? Calomel. What medicine has been used so cautiously by all, and altogether rejected by some? Opium. Now, surely this would not be the case if the mucous membrane of the intestine were the seat of the disease. Again, is there any affinity between English and Asiatic cholera? I believe they differ only in degree. Lastly, what treatment most quickly cures our autumnal cholera? Calomel and rhubarb: at least according to my experience.

Having thus called the attention of the Society to the opinion of, (according to the late Dr. James Johnson,) one of the most original thinkers of modern times, it may be as well to run through the various symptoms of the disease, to see whether the opinion I have read will satisfactorily explain them. Of the nature of the stools, I have quoted what Dr. Fletcher had to say in defence of their hepatic origin. But this does not forbid the presence of some secretions from the mucous membrane of the alimentary canal, excited, as it would naturally be, by the passage along its tract of so much vitiated secretion. The vomiting which attends night sometimes take place as the result of the powerful contraction of the abdominal muscles, but more frequently as the result of the inordinate stimulus to which the stomach is subjected from the vitiated secretion within it. Next let us take the violent cramps, and what are these but the consequences of the impression made upon the spinal marrow, by the presence in the bowels of vitiated secretion, and by the inordinate peristaltic action going on there, thus giving rise to reflex action, similar in every respect to the same symptom occurring during the night in gouty subjects. When gouty, or during pregnancy, from irritation of the gastro-intestinal mucous membrane, as a consequence of that condition, the distressing tormina and the hurried dejections are appropriate concomitants of such a condition of the alimentary canal.

The torpidity of the kidneys, indicated by the non-voidance of the urine, is clearly dependant on the depressed state of the circulation, coupled with suspended digestion, and diminished cerebral influence. The coldness and blueness of the surface is equally plainly dependant on torpidity in the function of the lungs, whilst that torpidity itself stands as an effect of the diminished power of the heart to propel the blood throughout the system in its wonted manner. As to the heart itself, its enfeebled power must be considered as the result of the shock to the heart itself, which the presence of the disease has occasioned, whereby its irritability has been exhausted. Of the state of the blood, it is observed by Dr. Fletcher, p. 95,—“In Asiatic cholera the blood has by some, (Dr. Stevens, &c.) been represented as primarily affected, turned into an infected jelly for one thing, and of a prodigiously dark colour for another, the latter change dependant,

of course, on too little salt in the serum. These, however, are not primary, but secondary, changes of the blood, and arise from the depression of the powers of circulation, so that through the tardy flow of the blood through the parenchyma, its molecular changes are so sparingly affected, that it undergoes a partial coagulation. The use of warm saline injections is not to dilute the jelly aforesaid, nor to impart salts, but merely to afford a transitory stimulus to the heart, and accelerate for a time the circulation."

Having glanced at the chief symptoms in this disease, it remains to notice the order in which they manifest themselves, observing that the interval between them may vary in every case. In this, as in every disease, there is a stage (the latent) which can only be recognized by its effects; so that at one and the same time, we behold the direct effects of the disease, and its indirect or sympathetic effects. Thus, within a short time of the commencement of vomiting and purging, we have also, in some cases, the depressed power of the heart; but whether this exhaustion of the power of the heart is solely caused by the disease through sympathy, or whether the disease affect the heart through the brain, perhaps, it is not possible clearly to determine; but this much may be affirmed, that only in proportion as we remove the disease, shall we remove the effects, and so likewise with regard to the state of the lungs and kidneys.

That the disease is inflammation of the secreting portion of the liver will be borne in mind, and that state existing, the process of secretion at once commences, and its products correspond with the peculiarity and intensity of the exciting cause.

For Dr. Fletcher's views of the nature of inflammation, and of the system of nerves, by means of which its sympathetic effects are produced, I must refer the reader to his work. A bare enunciation of his doctrine might not command assent, and it might deter the mind from further investigation. Those only who understand his physiology, can appreciate his pathology.

On the subject of those who are most liable to be affected, it is well known that the vast majority of cases occur in this country amongst those who belong to the poorer classes—the ill-fed, the badly clothed, and badly housed, the beverage of whom is too often unwholesome, and whose bodies have been frequently found to be the seat of various organic maladies.

The treatment of this dire malady next falls to be noticed. The gravity of the disease must be borne in mind,—the shortness of the time we have for the use of remedies,—the impossibility of the patient living many hours unrelieved. All these considerations point to the necessity for decision, promptness, and vigour. And what have we to do? If what I have stated be true, the relaxed, debilitated, exhausted, distended, overloaded capillaries of the liver have to be relieved. Here we shall be agreed I imagine. If the patient be seen in the first hour or two of the attack, a vein should be opened and a certain quantity of blood drawn, if possible, according to the bulk and stamina of the individual. This done, I should be inclined to try the effect of a bandage of flannel about a foot wide, passed some five or six times round the body over the region of the liver, that the patient should be placed in an open bath, and water as hot as could be borne should be poured over the flannel for half an hour;

he should then be removed, having an oiled cloth put over the flannel to keep in the heat and moisture. This application of caloric follows as a stimulant to these vessels, it having been attempted to relieve them partially of their load by blood-letting. Whilst the bath and water are preparing, I should give a dose of calomel and colocynth in as soft a form as can be swallowed—say five grains of each—hoping thereby to hurry from the alimentary canal any irritating matters there. An emetic where vomiting exists, I can see no necessity for. The pills should be followed by an effervescing dose of citric acid and bicarbonate of potass, to be repeated every hour. A mouthful of potass water, [?] or thin clear gruel with or without brandy, may be taken if anything be desired, to quench the thirst. When the patient has been removed from the bath, and a couple of hours have elapsed since the detraction of the blood; if the heart's action be not recovered, the warm saline injection into the veins should be had recourse to,—not, as Dr. Fletcher observes, "to dilute the jelly aforesaid, nor to impart salts," but merely to afford a transitory stimulus to the heart, and thus accelerate for a time the circulation. Throughout the treatment, all that pains the bowels and stomach should undergo the observation of the medical attendant. The calomel should be repeated in doses of two grains, in the form of a pill, made with extract of liquorice, every hour, and the effervescing dose should be repeated equally often. By this latter medicine the intestines would be excited to pass on their contents, and thereby lessen the amount of morbid impression upon the spinal marrow, the cause of the excruciating cramps. Should the bowels cease acting, it would be as well to add a little sulphate of magnesia to each, or to alternate doses of the effervescing draught. As soon as the evacuations give evidence of the presence of healthy bile, the interval between the doses of calomel should be lengthened as much as possible. In the event of the heart's action failing, recourse should be had again to the warm saline injections; and if the stomach will retain it, to some brandy in warm thin gruel. At this stage of the disease, remedies having failed to rescue the patient, the use of galvanism through the liver appears to me worthy of trial.

There is one other means which should be used from the commencement, and that is, friction with some warm stimulating liniment, say equal parts of turpentine liniment, simple camphor liniment, and soap liniment. This should be used universally when the patient is not enveloped in the hot flannel bandage around his belly, and when he can have that means, it should be omitted in that part of the body until experience has proved its uselessness. A more potent remedy may be found in the use of boiling water applied to some cloths placed over the region of the liver for the purposes of vesication. It appears to me that if some four or six hours at the furthest, have been unsuccessfully employed in combating with the disease, that no further time should be allowed to elapse without the trial of this remedy. These means failing to bring about the third stage of the disease, I must leave to empiricism to suggest what next should be done. But supposing the third stage arrived at,—viz., the secretions lessened and improved, the heart's action restored, the vomiting abated, then, perhaps, the judicious use of

morphia may be tried with good effect. But in this stage we must be on our guard against secondary inflammation; for the diminished irritation in which every organ has been, is a state liable to excessive irritation, on the recovery of the part originally affected, and which, if you produce it, will assuredly end in that degree of diminished irritation constituting inflammation. Therefore, now, the less we can do, the better. Stimulants should be withdrawn,—repose should be encouraged,—nourishment of the highest kind should be administered, and thus nature would have a fair chance of avoiding the breakers which were a-head of her, when escaping the rock on which she had been so nearly wrecked.

There are one or two other points of a secondary nature which it may be as well to notice. The position of the patient is one such: of course the horizontal position must be enjoined; but that is not all, let him lie anyhow, rather than on his back—either side, or prone, if he please. He should also be assisted in getting out of bed, in turning, and not allowed to sit upright. The heart is too weak to allow of its being benefitted by the return of the blood being hindered by the sitting posture, and the brain likewise cannot spare any of the power which the blood in its vessels receives from the enfeebled heart. The temperature of the apartment must be kept steadily high.

The treatment which I have thus sketched will be looked at as embodying a general rule. Cases will occur where it would be losing time (to say the least of it,) in attempting to bleed. Every medical man has patients which he knows cannot bear the loss of blood, and such he would not hesitate to consider unfit subjects for that remedy; and so likewise will every other suggestion be subjected to the judgment of the medical attendant, and adapted to the individual's case before him. It must also be remarked, that with such a disease as Asiatic cholera attacking certain individuals, the result must necessarily be fatal; and well will it be for the practitioner when his knowledge of his patient's constitution enables him to judge correctly of what can be borne by him. It seems hardly necessary to say anything of the treatment of any secondary affection which may arise to interrupt and prolong the recovery of the patient.

OBSERVATIONS ON SCURVY

AS IT WAS DEVELOPED

IN BATH AND ITS NEIGHBOURHOOD, IN
THE SPRING OF 1847.*

By JOHN BARRETT, Esq., F.R.C.S.

(Read at the Quarterly Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, December 21, 1848.)

Of few diseases can it be more truly said that prevention is better than cure, than of scurvy. Under favourable circumstances its cure is tedious, and the means of cure are not always to be met with in the circumstances under which it occurs. But it is not

only that its cure is tedious, and sometimes for a time impossible, it is attended with consequences of a very dangerous character,—e.g., the effect it produces on old surgical cases; the re-opening of wounds; the disunion of fractures; and it certainly lays the foundation of fatal chest and other diseases, by breaking down the constitution. If we judge of it by the number of deaths in its recognized appearance, we may probably consider it a matter of secondary importance, but this, I have before said, is a very inadequate manner of judging. It is not a disease of sudden occurrence, it requires months' duration of the preparatory circumstances. But as there can be no doubt that it has appeared, and frequently, (where even the profession may not have suspected, it is constantly occurring,) is there, I would ask, no reason for fearing that a disease which has decimated armies, and destroyed fleets, may in our day regain a fearful and destructive influence, if we do not remove the causes of its occurrence, or if by foolish directions we increase them. There is much wisdom in that part of the address from the College of Physicians on cholera,—"The Committee do not recommend that the public should abstain from the moderate use of well cooked green vegetables, and of ripe or preserved fruits. A certain proportion of these articles of diet is, with most persons, necessary for the maintenance of health, and there is reason to fear that if they be generally abstained from, now that the potato crop has in a great measure failed, many persons, especially among the poor in large towns, will fall into that ill condition, which, in its highest degree, is known as scurvy, and that they will in consequence be the readier victims of cholera."

There is one point to which, I am ashamed to say, I have not directed either my own, or my correspondent's, attention. The Registrar-General, in his return for the quarter ending December 31st, 1846, says,—“No mention is made of the potato disease having had any direct connection with the mortality. The potato in a state of partial disease, has no doubt, been extensively consumed, without giving rise to any specific malady in man, or indeed having any appreciable connection with the disorders of the bowels, and fever, which were prevalent about the time the last crop came into use.” I asked one gentleman, who said some of his scurvy cases had not been debarred potatoes, whether they had been good or diseased, but this he could not inform me. A poor woman, aged 76, applied to me, October 31st, this year, for griping pains in the bowels, increased on pressure; evacuations once a day, relaxed; white dry tongue, and weak pulse. Three weeks before she ate some potatoes, which were very watery and yellow, and had not been well since. She took small doses of calomel and opium for a few days, which cured her.

It is a question of much interest—what is the nature

* Continued from page 177.

of those changes in the animal economy which give rise to the symptoms of scurvy. Its most efficient external cause, the absence of certain organic acids from the food is so definite and determined, that if there be any cases in which the discoveries of the chemist can be brought to bear on the investigations of the pathologist we should expect this would be one of them. Yet, hitherto, there seems to have been hardly an attempt at a pathological *rationale* of scurvy. The idea that the globules of the blood are in it, dissolved in the serum, is abundantly disproved by the fact that, scurvy blood will separate as rapidly into clot and serum as healthy blood; but I am not aware of any attempt to explain how it is that the absence of an organic acid from the food is attended with an improper excess of the water, fibrin, albumen, and the salts, with a deficiency of the hæmosine of the blood, for this seems to constitute the morbid alterations of the blood in scurvy. Dr. Budd remarks, "The study of scurvy is most instructive to the pathologist, showing as it does, the variety and importance of the effects which may result from a primary alteration in the quality of the blood, independently of any morbid change in the solids." I have no wish to underrate the importance of these morbid alterations in the blood, but I question whether future investigations on this subject may not show that this conclusion is rather too exclusive.

There is another fluid in the body possessing properties strongly distinguishing it from the blood, for a knowledge of which we are indebted to Liebig, and though attention has only lately been directed to it, there is reason for believing that it plays a very important part in the animal economy. "Besides the blood and fluids contained in the lymphatic and absorbent vessels, there exists in flesh a considerable quantity of a peculiar fluid, enclosed either in peculiar minute vessels, or more probably in the cells of the fibrous and cellular tissues. To this liquid Liebig gives the name of the juice of flesh, and he has lately subjected it to a minute investigation with very important results."—"Turner's Chemistry, 1848, p. 1280.) The important difference between this fluid and the blood is, that whereas, the blood is alkaline, containing phosphate of soda—an alkaline salt; the juice of flesh is acid, containing phosphate of potash, and acid salt, and several organic acids, the most important of which is the lactic. Now, it is interesting to remember that though some animals will live on food wanting in the vegetable organic acids, man will not. The carnivorous animals will of course live on flesh only which contains lactic acid, but there is abundant proof that man will not long subsist on flesh or even milk without scurvy, but must have a supply of food containing vegetable organic acids. We know that these organic acids, composed as they are, of the same ultimate principles,—i. e., carbon,

hydrogen, and oxygen in different proportions, are convertible into one another;—thus, citric acid, "when melted with an excess of caustic potash, is resolved into oxalic and acetic acids and water, which is merely a different arrangement of the same elements."—"Turner's Chemistry, p. 1039.") It is surely, therefore, no very bold hypothesis that in such animals as the carnivorous, the lactic acid may be derived from their food as lactic acid, but that the organization in man may require that it be derived from other organic acids which undergo chemical change after they have entered the body; and that unless such a change go on health cannot be kept up, but certain morbid consequences follow. And if the gastric juice be "very nearly identical with the juice of flesh, or fluid of the muscles," ("Turner's Chemistry," p. 1293,) we can easily understand how a deficiency of the means of supplying the animal system with lactic acid might lead to a disease presenting features of depraved nutrition like scurvy. Again, Liebig has shown that only a small fraction of the whole amount of bile can be detected in any shape in the fæces, and that the bile is unquestionably reabsorbed in the intestinal canal and re-enters the circulation, where it soon disappears; and if it be correct, as is supposed, "that the bile is resolved into lactic acid and other products before it is finally consumed," ("Turner's Chemistry," p. 1314.") any derangement of the digestive function, any affection of the liver, such as scurvy has been considered to present, would speedily react on the system and diminish the quantity of lactic acid, and consequently the chemical actions involved in its presence, and hence might follow the necessity of relieving this viscus which has been so strongly insisted on. Again, in his "Animal Chemistry," Liebig endeavoured to show, taking the then admitted formulæ for bile and for blood, "that the latter fluid, with the addition of a little water and oxygen, might be resolved into cholic acid and urate of ammonia,—that is, into bile and urine." Now, I would remark, that lactic acid is acetic acid, with two proportionals of water and one of oxygen. If, then, we were to suppose that in the liver this quantity of oxygen and water is removed from the lactic acid then existing in the juice of flesh and acting on the blood, we should get as products, bile, acetic acid and urine; the bile discharged in the alimentary canal, the acetic acid carried to the gastric juice, the urate of ammonia, by further oxidization, yielding finally carbonic acid, ammonia, and urea. But if there should be a deficiency in the quantity of lactic acid, of course this chemical change will be interfered with, the blood would not be exhausted in the liver, and might not this lead to the congestion of that organ?

In scurvy blood, whilst fibrin and albumen are in excess, hæmosine is deficient in quantity. But albumen and fibrin may be considered elementary

parts of the body, whilst hæmotosine, though possessing many properties in common with albumen, is probably the result of chemical change of one or both, and if this be so, its deficiency and their excess would seem to imply a deficiency of chemical action.

Another morbid condition in the blood of scurvy is the excess of the salts. Now, the most important salt of the blood is the phosphate of soda, which gives it its alkaline character, whilst the juice of flesh contains the phosphate of potash, an acid salt which is "the only phosphate that can be formed by an animal from food containing salts of potash without soda, such as inland plants." There can be no doubt that the function of the acid salt, the phosphate of potash in the juice of flesh, and apparently also in the gastric juice, is as important as that of phosphate of soda in the blood," and if the want of vegetable food should deprive the animal of the proper means of forming this, the balance of acidity and alkalinity of juice of flesh, and blood, would be interfered with, and all chemical changes involved in such proper balance and proportion might be also. The gastric juice contains free phosphoric acid, but if the food be principally salt meat, and wanting in fresh vegetables, it will necessary expose soda, not potash, to the acid, and may thus lead to that combination which gives the alkaline character to the blood, and may lead to the excess of the salts found in scurvy blood, whilst it may deprive the juice of flesh of its necessary acidity, and break up the proper balance as before observed. It is a remark worth consideration, the salting of meat is detrimental to its nutritive qualities, because an exchange takes place between the salt and the juice," that is, not only is too much salt carried into the stomach, but it is also deprived of the acids contained in the juice of flesh.

We have then, I think, reason for believing that in scurvy there must be very considerable suspension of those chemical changes which go on in health, but chemical action never takes place without a development of electricity. Our attention was called to this subject by Dr. Davies, at our summer district meeting, in a paper on "Traumatic Paralysis," treated by electro-magnetism. He then referred to the interesting facts relative to the development of electricity in the animal economy, brought forward by Liebig and Matteucci, and of which the following mention is found in "Turner's Chemistry," p. 1320:—"Another probable function of the substances which give acidity to the juice of flesh and alkalinity to the blood, is the production of electrical currents. It has been shown by Matteucci, that such currents exist in the body, and we can easily see how they may arise when we observe two fluids, one acid, and the other alkaline, separated by a membrane permeable to one or both, and the fluids in contact with muscle, and with nervous matter. At the request of Liebig, Buff constructed piles of

discs of pasteboard, steeped in blood, with slices of muscle and brain, which showed a powerful current from the blood to the muscle." But supposing the alkaline qualities of the blood to be increased (as by analysis we know they are in scurvy,) and the acid qualities of the juice of flesh to be decreased, should we not expect that there would be a constant decrease of electrical development. Now, from Dr. Davies's paper, for to this I must refer, not having read Matteucci's lectures, it would appear, that in rheumatism there is a marked deficiency in electricity; that in all muscles there is a constant current of free electricity, bearing a direct ratio to the vigour of the animal, and the degree of development of the muscular structure. But what symptoms are more constant or more strongly marked in scurvy than the absence of muscular vigour, and the presence of muscular pain, debility, and rheumatism. And may we not conclude, that in the suspension of certain chemical actions in the animal economy, the derangement of certain states of chemical proportion, in the different fluids, and in the consequent interruption of electrical development, to be found at once a *rationale* of the morbid changes which take place in the structures of the body, and of the symptoms of the disease. Dr. Davies also states that the higher the animal is in the scale of being, the greater is the amount of electricity developed. I have called your attention to an important difference between the carnivorous animals and man, who stands highest in the scale of organization; they will continue in a state of health living on flesh containing an organic acid—the lactic acid; but man requires a vegetable organic acid, and one which, if it should be a source of lactic acid contained in his muscular fluid, must be so by undergoing chemical change, and thereby giving rise to electrical development. And may we not, therefore, conclude that the necessity for this superior degree of electrical development, connected, as it is, with his superior organization, is one reason why he requires in his food a vegetable organic acid?

These remarks have extended to such a length that I fear I shall be looked on as hopelessly affected with the *cacoethes scribendi*. In palliation, I must remind you, that I have been bringing before you the opinions of a number of medical men, on a question of really national interest. Some credit, however, I must take to myself for sparing you the infliction of all my scribblings. I may say with Pope,—“For what I have published, I can only hope to be pardoned; but for what I have burned, I deserve to be praised. On this account the world is under some obligation to me.”

CONGENITAL ABSENCE OF THE CRYSTAL-LINE LENS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

The following description of congenital affection of the eyes, although not occurring in the human subject, appears worthy of record in the pages of the *Provincial Journal*.

I remain, Sir, your obedient Servant,

AUGUSTIN RICHARD.

Red Lodge, Bristol,

March 22, 1849.

The subject was a calf, born blind, and unable to follow its mother about: according to the account of the butcher, being totally blind; and the examination of the eyes after the animal was killed shows that, if it had any power of vision whatever, it must have been merely the power of distinguishing light from darkness.

Both eyes were smaller than calves eyes usually are, and both presented, externally, opacity of the cornea, to which the iris was evidently adherent. In one there were three small surfaces of adhesion, in the other only one; the rest of the cornea was transparent. In one eye the pupil was visible, but in the other (in which there were the three opacities,) it could not be distinguished through the cornea. The iris was much thinned at the adherent points, so much so as to render it doubtful whether it existed there at all, or whether it was not the separation of the ciliary border of the iris from its attachments, allowing the ciliary processes to bulge forwards into the anterior chamber, as far as the cornea. The margin of the pupil was almost entirely adherent to the subjacent parts; in one eye the aperture had its natural size, in the other it was very much contracted. The choroid and retina were healthy, but upon dividing them, so as to turn out the contents of the globe, it became evident that there was no lens. The posterior surface of the iris was in contact with, and adherent to, the anterior surface of the hyaloid membrane. The ciliary processes were present; and in one eye the capsule of the lens was tolerably distinct, in the other it was not to be found. The lines upon the anterior surface of the vitreous body, called "the ciliary zone of Zinn," were in the usual form. The vitreous humour itself was perfectly transparent. The condition of the eyes was therefore the following:—Absence of the lens, synechia anterior and posterior, (adhesion of the iris in front and behind,) and staphyloma of the cornea and iris.

It appears to me most probable, that there was at one period of intra-uterine life, an escape and loss of the crystalline lens, and that the other changes were the result of the subsequent inflammatory process, at any rate the state of the organs, as far as their external appearance went, very much resembled the eyes of those who have met with an accident, and lost the lens through an aperture at the edge of the cornea, leaving the healing process to nature.

Cases of congenital diseases occur sufficiently frequently, both in the eyes and other organs, to render it quite certain that the fœtus is subject to most, if not all, the complaints by which the body may be affected after birth.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, APRIL 18, 1849.

We avail ourselves of the present opportunity to direct the attention of our readers in a more special manner to the notice inserted in the last number of this Journal, respecting the therapeutical value of cod-liver oil in phthisis pulmonalis. It will, we are assured, be readily conceded, that there is no subject upon which the combined experience of the Provincial Medical and Surgical Association can be brought to bear, of deeper interest to humanity, than one in any manner connected with that devastating malady, and we trust that Dr. Ranking's appeal to the individual experience of such of our associates as are familiar with the effects of cod-liver oil in its treatment, will meet with a ready response.

We are the more earnest in our wishes on this matter, because we are confident that the enlightened body of practitioners, of which this Association is composed, is capable of affording a mass of valuable information on any point, such as no other section of the profession could produce, and we should therefore regard the results of their communications with much interest. We need not remind them that in according their aid towards the elucidation of the question proposed, they will be carrying out one of the main objects of the Association.

As far as we understand Dr. Ranking's request, it will not involve any great degree of trouble on the part of those who may favour him with communications. He is anxious to have information on the following points:—

1. The number of cases in which the oil has been exhibited, with the proportion of successful and unsuccessful cases.

2. The stage at which the oil has been exhibited, whether in the incipient or advanced.

For convenience sake it may be advisable to divide the cases of phthisis into three stages—the *incipient*, in which the tubercular matter is not softened, as indicated by the following signs:—Slight depression and immobility of the subclavicular regions, with rough, jerking, or deficient respiration, and some dulness on percussion; the second, in which the tubercular matter is softening, the signs being as before, with the exception that the respiratory

murmur is replaced by mucous râles; and the advanced stage, with cavity or cavities.

He also wishes to be made aware of the amount and duration of the improvement in the several cases, in regard to the expectoration, diminution of cough and night sweats, increase of weight, &c., as well as of any unfavourable symptom which has supervened upon its employment. These questions, we are sure, will be answered by such of our associates as have had experience of the effects of the oil, both with willingness and facility.

We shall look forward with interest for the result of Dr. Ranking's investigations. Many, we are aware, regard with apathy any form of medication connected with consumption, but we are well assured, from our own observations, as well as from the concurrent testimony of Dr. Williams (*London Journal of Medicine*, No. 1,) and others, that in cod-liver oil we possess a means, if not of curing consumption, yet of suspending its ravages for months, and even years, superior to any other which has ever been brought before the notice of the profession.

If Dr. Ranking's enquiries succeed in establishing this our present belief, upon the only sure basis afforded by extended investigation, he will have accomplished a task both creditable to the Association, and of the highest value to society.

Proceedings of Societies.

BIRMINGHAM PATHOLOGICAL SOCIETY.

December 7th, 1848.

FRANCIS ELKINGTON, Esq., in the Chair.

SPONTANEOUS AMPUTATION IN UTERO.

Mr. F. Elkington presented a specimen of spontaneous amputation of one lower extremity of a fetus in utero, and gave the following description of the body of a male child, born the 10th of September, 1848:—It presented no symptoms of life; the integument of the scalp is of unusual thickness, containing fat; no ossific matter has been deposited higher than just above the base of the brain, the brain being covered in by a cartilaginous membrane, easily cut with the scalpel, the course of the sutures being indicated by white lines; the membranes and substance of brain appeared healthy, as far as an imperfect examination can determine; behind the situation of the posterior fontanelle is a pendulous body, more than an inch long, composed of integument and dura mater, which latter structure comes through a bevelled opening in the cartilage; the conformation of the chest and abdomen are normal; thymus gland weighs rather

more than four drachms; heart healthy; lungs small and solid, lying near the spine; liver, stomach, and intestines, appear healthy; a single *cyst*, about the size of a *hen's egg*, containing a glairy fluid, in the lesser omentum; kidneys large, pale in colour, containing numerous small cysts, the difference between the tubular and cortical substance being in some parts nearly, and in others entirely, lost; the left lower extremity presents a well-marked specimen of spontaneous amputation in utero; that this has taken place will be readily perceived on examination of the part, a thin cord being present, shewing where the other portion had probably been recently attached. The other extremities well developed.

IMPERFORATE ANUS.

Mr. Elkington also communicated a case of imperforate anus in an infant in which the rectum burst fifty hours after birth. The following is a description of the lower part of the intestinal canal of a mature child which lived fifty hours, presenting no peculiar symptoms until a short time before its death:—It may be noticed from the preparation that the *rectum* terminates abruptly about an inch from and below the level of the *anal* aperture, the gut being firmly united to the surrounding structures by a *fascia-like membrane*. Some distance up the bowel a ruptured opening has taken place, about the size of a shilling, the part around being thinned for some distance; a large quantity of fecal matter escaped into the cavity of the abdomen, thus producing the death of the child.

CORRODING ULCER OF THE UTERUS.

Mr. Simons narrated the following cases of this affection:—

Elizabeth Bromage, aged 72, the mother of eleven children, has been suffering from disease of the uterus for twenty years. She came under my care about twelve months since; she was then suffering from constant vomiting, great pain in the uterine region, with enlarged inguinal glands. There was a constant discharge from the vagina, of a muco-purulent nature, mixed with blood, and having a smell somewhat like garlic. On examination, the entire os uteri and one half of the posterior wall of the organ was destroyed by ulceration; and there was also a ragged ulcerated opening through the anterior wall of the vagina into the bladder, about an inch behind the commencement of the meatus urinarius. The fundus of the uterus was healthy. The inguinal glands had suppurated.

Ann Bott, aged 32, married eleven years, the mother of four children, the youngest being six years of age; has been separated from her husband (a soldier,) for six years; her general health was good until the last nine months; had always menstruated regularly until nine months since, when, after suffering much pain in her back, she had an attack of menorrhagia, which lasted about nine weeks; from this time till her death she had constant pain in the uterine region, with a discharge of mucus (occasionally mixed with blood) from the vagina. She came under my care about two months since, when she complained of constant vomiting, and of very severe pain in the uterine region. There was no enlargement of the glands. Upon examination per vaginam the posterior

lip of the os was found to be ulcerated. She died, worn out by pain and by the vomiting.

Sectio cadaveris.—The os uteri was entirely destroyed by ulceration; the cervix was also in part destroyed by the ulcerating process, which had also extended over the portion of vagina connected with the uterus, but had not produced any perforation of its walls; the body of the uterus healthy, its lining membranes of a deep colour.

APOPLECTIC CYST IN THE BRAIN.

The following case was communicated by Dr. Russell:—

Mrs. A., aged 77, of full habit and good health. She had been a nurse. About four years ago she had an attack of hemiplegia, the right side being affected. She was bled from the arm, and she gradually recovered; the right arm has ever since been weak, and her speech has remained a little drawing, but she could walk as well as ever. I was sent for November 10th, and found that she was again suffering under an attack of hemiplegia, the left side being affected on this occasion. She was speechless, but apparently sensible; the left pupil was rather more dilated than the right, which was natural; she vomited whilst I was present; she passed a considerable quantity of water since her seizure involuntarily; pulse was regular, and natural as to power; some blowing out of the cheeks, and some stertor; great drowsiness. For some days previously she had been very cross. She was seized at half-past twelve, as she was preparing to dine, having taken a walk after her breakfast. She retained the power of speech some time after the use of the left side was lost. I applied leeches to the temples, and ordered a turpentine enema. Her state quite precluded any active treatment. She lived a few hours more than two days and a half from the time of the attack. She remained sensible about sixteen hours, but afterwards was motionless, and apparently unconscious. She never swallowed; her bowels never acted; she passed urine involuntarily; she had no convulsions; her pupils were quite insensible.

Sectio cadaveris sixty hours after death.—Decomposition had commenced; trunk fat under the skin, and in the anterior mediastinum. Lungs rather loaded with bloody fluid. Heart contained a good deal of dark, half-coagulated blood, on both sides: its lining membrane and its valves very deeply stained with blood; the right auricle completely dyed all through its coats with the same dark tinge, presenting externally a remarkable appearance. When the heart was opened air issued, and there was some crepitation on pressing its walls; no atheroma in the commencement of the aorta, nor was the lining membrane of that vessel at all stained. The brain was quite firm, and did not indicate decomposition having commenced; the membranes rather full of blood; the grey and white matter very distinct; there was a large apoplectic clot in the right hemisphere, it lay on a level with the ventricle, but quite clear of it, and extended along the middle third of the hemisphere; internally it appeared so near the ventricle as to discolour its walls, but did not rupture them; externally it was covered by fully an inch of cerebral matter, excepting in one part, where it had formed an irregular passage to the surface, and was just covered in by the membranes, and by a thin layer of brain; it passed downwards, becoming gradually smaller. In the left hemisphere was, (what was probably the remains

of the former effusion,) a narrow rounded passage, which would about admit a quill, and about half an inch in depth; it was first opened on a level with the roof of the ventricle, and passed nearly perpendicularly downwards; it was situated about three quarters of an inch outside the ventricle, and nearly in the middle of the long diameter of the hemisphere; it contained a spongy cellular tissue, and its lower part a small, firm, smooth substance, quite unattached.

DISLOCATION OF THE CERVICAL VERTEBRÆ.

A case of disarticulation of the fourth cervical vertebræ from the fifth, was detailed by Mr. R. L. Baker.

I was summoned to the patient from whom this specimen was taken on Friday evening, the 10th of November, at ten o'clock. He was a strong muscular man, aged 25, about the average height, of drunken habits, but had never suffered from disease of a serious nature. His employment, that of a gentleman's servant. In this capacity, whilst going from Birmingham in his master's cart, he either was thrown or fell from the cart, and received the following injuries:—Various abrasions and contusions of a slight nature on many parts of the body; an oblique contusion occupying the middle third of the space between the left parietal protuberance, and the external angular process of the frontal bone; a lacerated wound of the pinna of the left ear; there was also a bruise on the right side of the head, corresponding to the one on the left in situation and appearance, rendering it probable that the wheel had passed over his head; and another bruise at the back of the head, upon the superior part of the occipital bone, and upon the lambdoidal suture; there was no appearance of a bruise upon the integument at the back of the neck. His limbs were completely paralysed, both upper and lower, but warm, although for an hour he had been lying on the damp ground before he was found. The iris was insensible to light, but not dilated; the respiration was slow, easy, and not at all stertorous; his pulse was slow and intermittent. He muttered incoherently, but could not be roused to answer any questions, but the person who first found him on the road says that he requested to have his nose rubbed by a bystander, indicating sensibility of the face, but paralysis of the arms. He swallowed with great difficulty liquids that were given him. On elevating his head there was not the slightest opposing muscular effort, and on raising him in bed the head dropped forward, and the neck seemed unusually loose and unresisting, and the spinous process of the seventh cervical vertebra appeared more prominent than natural, although I thought not sufficiently so to afford any decided guide for the diagnosis. Understanding from his friends that he was drunk, which was afterwards proved at the Coroner's inquest, and in the absence of stertorous breathing, or convulsive contraction of the muscles, I considered that there was no compression of the brain, and thought that the adoption of any treatment would be unsatisfactory. I decided to wait until the next morning, in hopes that the effects of the stimulants would be gone off, and that I should then be able to form a satisfactory diagnosis, for, of course, from the paralysis of the limbs, and the condition of the pulse, I concluded some serious injury had been inflicted upon the spinal cord. On leaving him I requested his

friends to let me know if any change took place in the night, and if not, I promised to see him in the morning. I did not hear from his friends, and therefore I visited him the next morning, at ten o'clock. I found his pulse much weaker than the night before, and still intermitting; the surface of his body pale, and much lower in temperature. He was evidently fast sinking, and expired an hour after I had left him.

At the *post-mortem* examination I observed the external marks before enumerated. On opening the head I found the membranes of the brain had their usual appearance, with the exception of the pia mater, the vessels of which were rather congested. The cerebrum and cerebellum were firm and quite healthy in appearance, but on cutting through the spinal cord, and placing the head in a depending position, a quantity of fluid blood, of a dark colour, issued from the foramen magnum. In cutting through the integuments at the back of the neck, I found great extravasation of blood between, around, and within the structure of the muscles near the seat of injury, which later consisted of a disarticulation forwards of the cervical vertebra, at the fourth and fifth bones. The intervertebral substance was torn, but there was no fracture of the body of either bone. A fracture extended through the right superior articulating process, and across the base of the transverse process of the fifth vertebra. The cord was crushed; fluid blood was effused into its sheath; brain healthy.

OVARIAN DISEASE.

A preparation, consisting of cysts in the ovary and in the walls of the vagina, was exhibited by Mr. F. Elkington.

The preparation shews a well-marked specimen of ovarian disease in its earliest stage. The cyst is about the size of a pullet's egg, apparently unilocular, its contents transparent. There is a second cyst the size of a grape suspended by a long pedicle from the lower surface of the diseased ovary. The preparation also shews a cyst the size of a pigeon's egg, situated at the upper part and left side of the vagina. It contains a fluid and is nearly transparent. It appears to be covered on its inner surface only by the mucous membrane of the vagina, and on its outer surface by condensed cellular membrane. The fibrous coat of the vagina is not continued over the cyst. Its fibres are seen terminating in a circular or crescentic margin, or well-defined edge, forming a round opening occupied by the cyst. The uterus healthy. The preparation was removed from a lady who died suddenly of apoplexy. She was 48 years of age, and the mother of six children. Three years before her death I attended her for ulceration of the os uteri. On introducing the speculum I noticed a small transparent body the size of a large grape, situated about the commencement of the upper third of the vagina. It appeared to hang over the edge of the speculum and rather to obstruct its passage, but on pressing the instrument onwards the tumour disappeared. In making a digital examination, I could not feel any tumour, but the wall of the vagina at one part felt softer and less resistant than usual. I had to use the speculum many times. On several occasions I made a digital examination and always with the same result. When

the parts were first removed the vaginal cyst was flaccid and contained very little fluid. After it had been immersed some days in spirit, it became distended with fluid.

SCIRRHUS OF THE RECTUM, LIVER, AND PYLORUS.

Mr. Bindley narrated the following case:—

John Screen, aged 55, of short stature, and spare habit, by trade a bellows-maker; has been a hard-working temperate man, and usually enjoyed good health. A brother about his own age died of phthisis. For some years past has been subject to hæmorrhoids, by which he often lost a good deal of blood, and became considerably reduced in flesh. In the early part of the present year the piles ceased to be a source of inconvenience, and about midsummer he began to complain of uneasiness in the fundament, with a sense of heat, and occasionally shooting pain. His bowels were relaxed, and he often passed bloody mucus with the stool.

On September 11th, 1848, when I first saw him, in addition to his above symptoms, he complained of an almost incessant desire to pass a stool, severe pain preventing sleep, loss of appetite, and flatulency. The tongue was dry and furred, with a red line down the centre; bowels relaxed, the fluid fæces being always mixed with mucus and blood.

On examining the rectum with the finger it was found (from within half an inch of the anus as far as the finger could reach) occupied on all sides by rounded elongated masses, smooth on the surface, and of considerable firmness, between which it passed with difficulty and pain. The mucous membrane was entire, and no blood followed the finger. These scirrhus growths lay in a longitudinal direction, and varied in size from that of a quill to that of the finger. His skin did not present the tint of cancerous cachexia. He was ordered leeches to the anus, hip-bath, morphia at bed time, copaiba, with liquor potassæ. For some time he was relieved.

October 22nd. There is a hard and tender swelling around the anus, indicating the formation of an abscess; the finger would not pass more than an inch into the rectum; scirrhus tumours enlarged, nearly blocking up the passage; has had no evacuation from the bowels for a week; has difficulty in passing urine; pulse 80, and weak; takes but little nourishment; is becoming emaciated; face flushed; extremely irritable. The bowels were with difficulty moved by the *Mistura Sennæ Comp.* The abscess about the anus formed and broke in a few days, its contents consisting of pus, mixed with fæculent matter, thus showing its nature and origin. After this the fæces passed altogether by this fistulous opening beside the anus, and by the establishment of this free passage for the stools, he was for some time considerably relieved, but in a few weeks, by the growth of the scirrhus tumours higher up in the bowels, constipation again ensued. About the end of October the right lobe of the liver was found enlarged, and projecting from beneath the cartilages of the ribs towards the umbilicus; it was indurated, and had an uneven surface, but was not tender. At the same time, in addition to loss of appetite and flatulency, daily vomiting had supervened, the matter ejected consisted at first of food mixed with mucus, but

subsequently had the coffee-grounds character. Tongue dry, and black in the centre. Great thirst.

In the beginning of November the ulcerative process was set up, and there was a great discharge of pus, mixed with blood and mucus.

On November 20th he had had no evacuation from the bowels for ten days; an enema of warm water was thrown up to the extent of three pints, and was followed by so copious a discharge of fluid fæces, as to bring on fatal collapse on the 29th.

Sectio cadaveris forty hours after death. The brain and thoracic organs healthy. The liver rather smaller in size, of firm texture, pale in colour, uneven on its surface, and presenting, when cut into, extensive cancerous degeneration. In the left lobe it was infiltrated throughout; in the right deposited in rounded masses, of various size. The pyloric end of the stomach and commencement of duodenum were drawn up and firmly adherent to the under surface of the liver, in the region of the gall-bladder, of the existence of which no trace could be found. Within the coats of the pylorus was a small mass of scirrhus, partly blocking up the opening. The stomach was greatly distended, and contained two pints of dark coloured fluid, with coffee-grounds deposit. Small intestines, spleen, pancreas, and kidneys, sound, except that the pelvis of the right kidney, and commencement of its ureters, were somewhat dilated. Whole of colon greatly distended, and the transverse arch pushed downwards to the pelvis. In the rectum the disease was limited to its lower half, extending for the length of about six inches from the anus, reaching to the recto vesical fold of peritoneum, but not passing higher. The scirrhus matter is deposited chiefly within the coats of the gut, projecting inwards in the shape of tuberiform masses, of a yellowish grey colour, semi-transparent and glossy; when cut into they exhibit the usual appearances of scirrhus, with the deposit of a softer matter in the meshes of the stroma. Its mucous membrane is ulcerated, the ulcerated opening at one point leading into the cavity of a large abscess, formed within the coats, the walls of which have a sloughy appearance, and communicate with the fistulous aperture by the side of the anus.

ON

LIFE INSURANCE AMONG MEDICAL MEN: PROVIDENT SOCIETIES: ANNUITY & ENDOWMENT INSTITUTIONS: AND THE BENEVOLENT FUND.*

By WILLIAM NEWNHAM, Esq., Farnham.

To those who have been positively unable to avail themselves of any of the preceding methods of relief, or who, from misfortune, have omitted to do so;—to those who have been deprived by sickness, or other temporary difficulties, of the means of earning their own livelihood;—to those whom insanity has deprived of the power of continuing their exertions;—to those families whose main support has been suddenly re-

moved in the earlier part of life, and before provision for the future has been made;—to those whose last penny may have been spent during protracted illness, upon the comforts of him who is “gone before;”—to the destitute orphan—aye, even to him who has kept his mother from starving by manual labour of the severest character;—to those who have suffered cruel privations, and have been exposed to the “whips and scorns of time,” and the neglect and the contumelies of a selfish world;—to all these and many other forms of misery, the Benevolent Fund alone extends its offers of relief, without money and without price,—and pursues its course of unwearied practical benevolence, wherever misery is to be found *which cannot be relieved by other institutions*: a fact which has been shown in a very marked manner during the past year, since in several instances the Benevolent Fund has relieved cases which have been transmitted from the local societies, because by them unreliable.

And yet, strange to say, this institution languishes for want of due support, and is assailed by objections, a few of which I shall now consider.

First,—“It is not required: and except in cases of gross misconduct—of improvidence—of reckless and thoughtless expenditure, every medical man has the opportunity of providing for his family, and of preventing their being left dependent on the world.” Now, what are the facts? Why they are these:—first, that medical men *with families*, are very seldom in a position to make provision for those families, unless they have private fortunes of their own;—that very usually their private fortune has been expended upon their education and first establishment in life;—that it is very unusual, where professional income easily covers professional expenses, and those occasioned by the maintenance and education of children;—that commonly they are poor, and at each year’s end are scarcely level with the world;—and that when they die they leave their families without the means of permanent succour.

But again, what are the facts?—let the history of the last year of the Benevolent Fund tell its own tale, and yet it is to be recollected, that this will reveal only a very small portion of the sum of professional misery. Moreover, this history is taken from the class of regularly educated practitioners only, and is confined to those whose habits of prudence, and providence and sobriety, entitle them to the regard and esteem of the charitable. The Benevolent Fund has relieved during the last year upwards of thirty cases, after due investigation, and it has rejected several others which would not bear the searching test of inquiry. Among these cases so relieved, we have a man most highly respected in his town and county, yet struggling with the “*res augusta domi*,”—assailed by *ramollissement* of the brain—his little all expended during a three years’ illness—dying, leaving a widow and five children—the eldest, only fifteen, who is keeping a little school and earning two shillings a week,—the rest dependent absolutely for bread upon the tender mercies of a Board Guardians. Another is attacked by insanity, and in the prime of life is cut off from his professional income; he has no

private property, and he becomes pauperized. His family are as yet uneducated; one only by her exertions as governess, can contribute to the support of her parents. But how can the scanty earnings of an ill-paid governess support a father and mother and five brothers and sisters, altogether without income? It is notoriously impossible. Another, who has by great exertion just kept his family above the cravings of want, dies in a few days from fever caught in the discharge of his professional duties, and his widow and three children are thrown upon friends; the children are sickly and unable to do anything for themselves; the friends of their father have done something for a time, but except for the interference of the Benevolent Fund the workhouse became their last and only refuge. Another has died and left a widow and five children, all young, and as they could not be educated, they are to be found as they grew up, filling menial offices,—and the youngest boy in order to keep his mother from starvation, has been serving the masons. The widow had been aided some years since, is now dead, and this year her exemplary boy, who had been snatched from his degrading position, and educated partly by the kindness of friends and partly by the aid of the Benevolent Fund, has been rescued from the wearisome prospect of manual labour, and placed in a position to follow his father's profession;—has been apprenticed to a most respectable surgeon, the Fund engaging to give £20 a year for three years, towards this object. These are specimens which occur to my memory at the moment: they are not selected as the worst of their fellows, but are ordinary, every-day examples. Time would fail me to tell one half of the misery which comes before us.

But it is replied, "these things ought not to be." And yet in the nature of things it is impossible to be otherwise. It is very easy for the affluent, and the young, and the healthy, with the buoyancy of life's prospects before them,—with hopes unbroken,—and aspirations not disappointed,—and feelings unchilled by repeated contact with a selfish world;—it is very easy for these, and such as these, in the day dream of imagination, to assert that these things ought not to be! Yet, laying aside all feeling, let us look at the question in a plain practical point of view. First, the profession is overstocked: it is vain to attempt to deny this, because it is proved by the number of candidates to fill up every vacancy, however occasioned. Secondly, when a market is overstocked, whether it be with talent or any other marketable commodity, a depreciating operation is effected upon the commodity so to be disposed of; and the holders of such commodity must be deprived of their profits, compelled to dispose of it at a very trifling gain, perhaps at a frightful loss, or else be irretrievably ruined, because they can get no sale at all. Now, the fact is, that everywhere, except in some few fortunate cases, the remuneration for professional talent has greatly diminished, and every man in some way or other has to submit to this depreciation. Especially is this remarked in every instance of public competition. No sooner is a vacancy advertised in a *Poor-Law Union Surgery*, than numbers

step forward as candidates,—as candidates for what?—even for a position of the deepest responsibility, and for a salary which, if the holder does his duty honestly by the poor, leaves him at the end of the year without a penny, and minus a very considerable proportion of his expenses. And in order to prevent this competition, and the introduction into a neighbourhood of a young new-comer, willing to make any temporary sacrifice to obtain practice, the older and more-established resident medical men yield their services with the conviction of a great loss to be sustained, merely to keep their own circle of patients uninvaded. There can, therefore, be no doubt that the profession is overstocked, and as a necessary consequence what it has to sell is disposed of at less than its proper price, and if so, at a loss; that loss being represented by a certain amount of personal and family privation, which pride and self-respect conceal from the sight of the world. If then the commodity of talent be sold at an unremunerating price, it is clear that the vendor must become impoverished, and that sooner or later he must be involved in pecuniary difficulties. Under these circumstances he gets on difficultly, he is assailed by indisposition, he is unable to continue his laborious exertions, and after a little catching at the straws of the drowning man, he sinks into indigence, and requires aid. And how is this to be avoided? The life of a medical man is proverbially uncertain: he is exposed to a thousand casualties from which others are exempt;—he incurs the risk of infectious malady;—his nights are disturbed often for very long together;—his days are unusually weary, wasted, and worn;—he is exposed to the inclemencies of weather without the possibility of protection, or of putting off his visits till a fine day;—and above all, to the difficulties with which he has to struggle, in the vain effort to do his duty, and to please at the same time. The consequence of this unusual exhaustion is, that his health gives way, and he becomes less capable of attention; by degrees his practice and his means of subsistence decline together, and the end of all is, that he is more and more straitened, and dies in debt, or perhaps is immured within the walls of a prison, and his family are left beggars. Again, he is exposed to the like casualties as others; and he is often ruined by misfortune—by injustice—by the failure of others—by law—by sickness in his family—by a spendthrift son—and by various other causes, all of which legitimately make him poor, and therefore there must in the very nature of things be instances of misery and destitution.

But then it is said, these should have been provided against. How? By Life-Insurance? Of no use till he were dead: and by the supposition, his income has not been such as to pay a life-insurance premium to any available amount. By belonging to a Provident Society? This gives nothing to himself, though it may to his widow and children, and even this in itself would generally be inadequate to their support; and perhaps he may not have been a member long enough to ensure even this pittance,—or his claim may have been forfeited by his being unable to continue his subscription. Instances of these have come before us,

so that here again misery and destitution are inevitable and therefore the *Benevolent Fund* is necessary for their relief, and no other fund is available for such relief.

Again, it has been objected that the existence of this fund is *degrading* to the profession. **DEGRADING!!** It may indeed be *degrading* to the profession to have within its pale many men of very moderate talent,—of very moderate pretensions to gentility,—of very moderate principle,—of very moderate income! It may be *degrading* to the profession to number among its brethren many of the sons and daughters of misfortune,—many who have been disappointed in life,—many who have been harassed by sickness, and poverty, and misery! It may be *degrading* to the profession to find many of its members, whose lives have been cut short by disease contracted during the performance of their duties! It may be *degrading* to the profession to reckon among its members many who have been assailed by insanity, and whose brains, never strong, have been overturned by the constant stress laid upon that organ! It may be *degrading* to the profession to find many victims of phthisis, or some other of the almost innumerable forms of hereditary scrofula! It may be *degrading* to the profession to leave widows and orphans unprovided for and penniless, cast upon the wide world without one ray of hope, obliged to seek succour in menial employment, or to fly their native land! These and many other forms of existing misery may be *degrading* to the profession; but it is yet more *degrading* to acknowledge their existence and not to endeavour to relieve them. To pass by,—to say, be ye filled, and clothed, and warmed, and not to supply the means for satisfying hunger, and cold, and nakedness,—this is *degrading*! To turn away from the cry of the widow and the orphan,—to turn a deaf ear to the voice of him who is ready to perish,—this is *degrading*! To admit the evil and not to stretch out the hand to relieve it,—this is *degrading*!—or else it is degrading to feed the hungry,—to give drink to the thirsty,—to shelter the houseless wanderer,—to clothe the naked,—to visit the sick,—to release the prisoner,—to imitate our first and highest example—HIM who spent a life of love to man, in going about binding up the broken hearted, and healing every manner of sickness, and sorrow, and infirmity!

But further the principle is objected to. It is said that “where a certain sum is to be given away in charity, a certain amount of good must be the consequence; but it is wrong in principle, because it encourages dependence.” At every turn we meet with this objection, which is tantamount to saying—poverty induced by misfortune is a crime, and should be visited by punishment, not by relief, for relief increases the evil, and multiplies the claimants. This is a very fashionable objection, and is borrowed from the argumentation so often heard at the pay-table of Poor-Law Guardians. We will say nothing of the folly of insisting that persons who have not sufficient for the year's expenses should be capable of accumulating for a rainy day. We know it would be quite right if they had the means, but they have not. But it is

objected that by our Benevolent Fund we take away the stimulus to economy, because parties know they can have relief if they get into difficulties, and are left destitute! They know it not: for, first, our relief is always inadequate to their daily necessities; it is precarious, because dependent upon the will of a committee, and the state of the funds at their disposal, and is never permanent, therefore can never be relied upon, and can never be said, even by the ultra-economists, to *create* distress. There is, in fact, no serious belief that it does *create* distress, but the argument may be useful among the other arts of evading a charitable subscription.

Again, these things are best managed by local funds, such as are already established, and not by a general fund, as if a system of favouritism or prejudice were not more likely to operate in a small circle of personal connection, than in the larger sphere, without personal connection, and where every case must be decided upon its own merits. Besides, the astounding fact that several cases have been sent to us by the local societies, inasmuch as they were unable to relieve them, because they were not members, and inasmuch as the investigation of every case is carried on, and sometimes at considerable difficulty, through local residents.

The real truth is, that there is no solid objection against the Benevolent Fund, and parties are aware that there is none, and that every objection may be traced back to its origin, in a real disinclination to give; and therefore, in concluding this paper, it behoves me to call on all my brethren to support this purely charitable institution, which languishes for want of funds.

And since it has been proven that the misery which it professes to relieve is inevitable, and must exist in the nature of things, it follows that it ought to be relieved. No, says an objector, the misery has been self created, and therefore should not be relieved. But first, we assert that we do not knowingly relieve cases which have resulted from improvidence and immoral habits; our object is to relieve the distress of misfortune, not of vice, and we are particularly careful on this point. But admitting (which I do not know,) that we may have been occasionally deceived, and that we may have relieved miseries which owed their *origin* to vice, and which in their consequences have fallen upon others not partakers in this vice, is this a sufficient ground for neglecting the ninety-and-nine cases of pure and inevitable misfortune, because in the one-hundredth the *victims* of the indiscretion of one have been relieved? Do unto others as you would be done by is the Christian law, and let us apply it. Suppose that we are called to patients suffering from dyspepsia, arising from their own want of care,—or to delirium tremens, from excess in alcoholic beverage,—or to syphilis,—or to any other of the thousand ills which flesh is heir to, and which are self-created, are we to stand by and refuse our aid, because the parties have been the authors of their own misfortunes? Such a position is clearly untenable, and the only difference is, that in one case *we pay*, in the other case *we are paid*, to relieve the distresses of others. As medical men this is our

manifest duty and mission; and O! let us not steel our hearts, and lock up the bowels of our compassion, and throw away as valueless the blessing of him that was ready to perish, simply because he is *our brother*, and refuse to him, our brother, an amount of aid which we should often proffer to a street beggar. I am almost ashamed to mention, in such a conjunction, *one penny* a week; yet a penny a week, or five shillings a year, from each one of our members, would give us an income of at least £500 a year; and it must not be pretended, that we are unable to give five shillings a year, or little more than a penny a week, to such an object. Let this be the *minimum*, and let each one give more if he can, according to his ability or inclination. If each one would look upon this act of charity as a *duty*, and really not a matter of choice, and let a larger or smaller sum be forthcoming from every pocket, and many a widows heart would sing for joy,—many a spiritless orphan would be gladdened by the smile of sympathy,—many a cheerless hearth of desolation would be irradiated by the gleam of hope,—and many a wasted spirit would again glow with vitality, from feeling that it was not an outcast because it was poor, and would be comforted by the conviction that its sorrows were soothed, and sought to be alleviated. Let me intreat my brethren to think on these things,—to “hearken and do,”—and to strengthen the Committee by the principled assurance that they would do what they could to support their self-denying exertions.

Yet perhaps it may be said by many, that they have insured their own lives,—or purchased annuities for their widows,—or endowed their children,—or belonged to a local provident institution,—or to a general annuity fund; and if so, they have done well, they have protected themselves and their families, *quoad hoc*, to a certain extent from want. All this is good, and is an offset from that provident charity which *begins at home, but does not end there*, for if so it is not of the nature of that heaven-born charity which “seeketh not her own.” You have provided for yourselves, and this is the strongest motive and argument for providing also for the distresses of those who have been unable to be thus provident, and to lay up treasures for themselves so that thus in aiding others, *you* may be providing for yourselves “treasures in heaven where neither rust nor moth doth corrupt.” If you yourselves are free from the fear of want, O listen to the cry of the destitute,—that feeble cry which is too frequently stifled by feelings of a most time-honoured description, and which has so often to be revealed by the kind detective hand of some neighbour friend. O listen to the feeble accents of grief unspeakable:—

“O give relief, and Heaven shall bless your store.”

WILLIAM NEWNHAM,

Hon. Treasurer and Secretary.

Farnham, March 22, 1849.

P.S.—I am quite aware of the great advantage it would be to the Fund, to publish in detail the cases relieved. But how dare we draw aside the veil of that “sacra miseria,” which courts the shroud of obscurity and shuns the sunshine of observation. How dare

we with the feelings of gentlemen upon our own hearts, expose to common gaze the sorrows of the riven bosom, and the penury and starvation of the solitary garret, and the weariness of that widowed heart, which contemplates with anguish inexpressible the innocent faces of thoughtless children, as yet unconscious of all the asperities of a selfish world.

To this appeal it is right to append the fact, that two important cases will come before the Committee on Tuesday; but that we have so largely anticipated our income, it can scarcely be prudent to relieve them, unless we can rely upon an extension of support from our friends.

W. N.

General Retrospect.

ANATOMY.

ON THE STRUCTURE OF THE SYNOVIAL MEMBRANE COVERING THE SURFACE OF ADULT ARTICULAR CARTILAGE.

Mr. Toynbee has recently published the results of some researches which are confirmative of the opinion advocated by Sir Benjamin Brodie, that the synovial membrane invests the entire surface of articular cartilage during all periods of life, so long as the cartilage is in a healthy state. The methods by which the presence of the synovial membrane can be displayed are the following:—“If the synovial membrane which surrounds the border of adult articular cartilage be traced to the margin of the latter, it will be found to adhere very firmly, and should an attempt be made to tear it from the surface of the cartilage, it will often give way; in some parts, however, and that not unfrequently, a continuation of this synovial membrane will be separated by laceration in the form of a thin transparent layer, from the surface of the cartilage to the extent of several lines. Another mode of shewing the presence of this delicate tissue on the surface of articular cartilage is, to make a very thin flap of the latter parallel with its surface, and then by means of a pair of broad-pointed forceps, to draw it gently but firmly in the same direction as that of the section. As a general result of this process it will be found that a layer of transparent membrane varying from two lines to half an inch in length will peel from the cartilage. A third way of demonstrating the existence of this membrane is to place a portion of articular cartilage under water, and to scratch its surface with the sharp point of a firm needle, till a fine membrane is observed to be lacerated, under which the needle may be introduced, and by careful manipulation, the adhesions between it and the cartilage may be broken and considerable portions detached.” In reference to the structure of this membrane, Mr. Toynbee says: “When examined by a magnifying power of 500 diameters, portions which have not been subject to much pressure present the appearance of compressed areolar tissue; portions from the central part of the cartilage are translucent, and have a nearly homogeneous structure; they present on their inner surface numerous fine

points, which appear to be particles of cellular tissue, which have been lacerated in the process of separation from the cartilage; sometimes the inner surface of this membrane presents shallow depressions, which correspond in size and shape with the corpuscles of articular cartilage over which they have been placed and against which they have been firmly compressed; not unfrequently some cartilage cells are seen adherent to the inner surface of the membrane.* Mr. Toynbee adds, "That this membrane is not a layer of cartilage seems evident from the fact that it contains no corpuscles, from its extreme and yet uniform softness and tenuity, the latter being so great that the membrane folds upon itself when floating in a drop or two of water, from the facility with which it is separated from the surface of the cartilage without using any cutting instrument, and from the circumstance that it is visibly continuous with the synovial membrane around the joint. The only fact which seems to militate against its being considered as synovial membrane is the absence from its surface of epithelial cells. The absence of the epithelial layer may, however, be accounted for, perhaps, from the fact, that it is not like the reflex synovial membrane—a secreting organ, and from its being subjected to great pressure."—*London Journal of Medicine*.

PRACTICAL MEDICINE.

CHOREA SUCCESSFULLY TREATED BY ARSENIC.

A case of this kind occurred recently in the clinique of M. Guersant. The practice is derived from the testimony of the profession in this country, and has also been extensively employed in Germany. M. Homberg regards it as the most effective of any of the medicines recently given, and finds it often succeed where others have entirely failed. Some of his cases are given below:—

CASE 1.—A little girl aged 11, had been affected with chorea for eight years, which had resisted a variety of modes of treatment. On the 22nd of Nov. she commenced Fowler's solution in small doses, and in three months was completely cured.

CASE 2.—A case of chorea caused by fright, in a girl ten years of age, and of two years' duration. Jan. 29th 1844, commenced the arsenical treatment, cured by the 5th of May.

CASE 3.—A girl aged 12, was the subject of chorea three years previously, and had a relapse in 1843. Purgatives and carbonate of iron failing to produce any amelioration of the symptoms, arsenic was given and found successful in a very few days.

The dose for a young child should not exceed two drops of Fowler's solution to commence with.—*Casper's Wochensh.*—*Encycl. Med.*, December.

BREAD FOR DIABETIC PATIENTS.

Dr. Percy gives the following recipe:—Take the ligneous matter of sixteen pounds of potatoes washed

free from starch, three-quarters of a pound of mutton suet, half a pound of fresh butter, twelve eggs, half an ounce of carbonate of soda, and two ounces of dilute hydrochloric acid. This quantity to be divided into eight cakes, and in a quick oven baked until nicely browned. At first gum-arabic in sensible quantity was also introduced into this bread, on the ground of the assertion of Professor Graham, that when that substance is taken by the diabetic patient, the proportion of sugar evolved from his system is not thereby increased, and that consequently it might probably supply matter for pulmonary oxidation. However, it was found that it rendered the bread tenacious and disagreeable; so that its use was subsequently abandoned. I wish it to be understood that whatever merit there may be in the production of this bread, it is entirely due to Mr. C. F. Palmer. My friend Dr. Evans suggests, and I think with reason, that this bread would probably be improved by the addition of a certain proportion of bran. Some gluten might also be added with advantage.—*Chemical Gazette*.

SURGERY.

GUN-SHOT WOUND: BALL OPENING THE GRAVID UTERUS: DEATH IN TWENTY HOURS.

At 1 o'clock a.m., March 20th, 1838, Dr. Eve, Professor of Surgery in the Medical College of Georgia, was called up to see Charlotte, a negro girl aged 19 years, said to have been accidentally shot. On arriving he found Dr. R. in attendance, and learned that the patient had just received a pistol ball at the distance of about six paces. She was engaged with a large dancing party when interrupted by the accident. She was standing near the fire-place at the time. The ball entered just above the anterior superior spinous process of the ileum, and penetrated transversely the hypogastric region. The probe and finger could follow in its track, without, however, ascertaining where it had lodged, or whether it had opened the abdomen. There was no external hæmorrhage nor intestinal protrusion. Besides the shock to the general system, there were no special symptoms beyond the ordinary appearance of a gun-shot wound. Upon inquiry he learned that Charlotte was about the fourth month of utero-gestation. At four o'clock a loop of the bowels protruded through the external wound, which was immediately returned by the taxis, and then retained by compress and bandage. The patient now exhibited symptoms of prostration, which continued to increase, notwithstanding the means employed to counteract them, and she died at 8 p.m.,—twenty hours after she was shot.

Early the next morning, March 21st, in presence of the Medical Class, the abdomen was laid open by a crucial incision. About half a gallon of clotted blood was removed from the pelvis, and a small *fœtus* with its *secundines*. The ball was found to have penetrated the abdominal parietes, passing through two or three convolutions of the small intestines; it then made a large ragged opening into the uterus at the fundus. The direction was transversely across the hypogastrium, and from the bone downwards.—*Philadelphia Examiner*.

* These appearances are given in wood-cuts published with the original paper.

HÆMORRHAGE FROM THE TONGUE SUCCESSFULLY TREATED WITH TINCTURE OF MATICO.

October 9th, 1847. W. B., fruiterer, aged 34 years, states that on the 6th instant he received a blow upon the chin, whilst the tongue was protruding from the mouth, which caused that organ to be wounded by the teeth. Hæmorrhage followed, so copious and uncontrollable, as to render it necessary to apply for surgical assistance. After many unsuccessful attempts to suppress the bleeding, for three days, by several surgeons, he was brought to this hospital in a very weak state, and placed under the care of Mr. Luke. The wound was at first rubbed over with a piece of the nitrate of silver, but the bleeding still continued. A saturated solution of alum was then applied by means of pieces of lint, but still without success; and at last the tincture of matico was had recourse to, and used in the same way as the solution of alum. Fortunately it had the desired effect of arresting the hæmorrhage permanently.

The patient states, that whenever bleeding from the nose had taken place it had generally continued for several days; also that when he was once bled from the arm it was found very difficult to stop the blood, which oozed through the compress and bandage for nearly four days. He further states that he was a patient in this hospital some years ago, on account of hæmorrhage from the urethra, which continued for the space of seven days, and was at last stopped by keeping a large catheter for a long time in the urethra. He was also, it appears, at another time in this hospital, in consequence of having received a wound on his hand, which bled for several days, notwithstanding continual pressure was kept up by compresses, thus showing a very strong hæmorrhagic diathesis. On inquiry, it is found that all the members of his family have the same hæmorrhagic disposition, particularly his father.

The patient, after having been one week in the hospital, without any return of the hæmorrhage, was discharged, with directions to take tonic medicines, and to use such other means as would be likely to have a tendency to strengthen his constitution and improve his general health.—*Lancet*.

OBSTETRIC MEDICINE.

DR. SIMPSON'S AIR-TRACTOR.

The merit of the application of Dr. Arnot's suggestion has been disputed by a Dr. Mitchell, a former pupil of Dr. Simpson's. This gentleman affirms that Dr. Simpson, in mentioning the subject to his class, made certain observations inviting his pupils to test their ingenuity in manufacturing an instrument, and that he accordingly gave his attention to it, and eventually perfected an apparatus, which he described and illustrated by diagrams in his answer to the questions brought before him during his examination for his degree. His complaint is, that Dr. Simpson, though he paid no attention to these remarks at the time, did in fact make use of them to bring out at a future period the discovery as his own. In reply Dr. Simpson disavows any acquaintance with Dr. Mitchell's written

answers, alleging that from his engagements he was in the habit of delegating the office of examiner to others.—*Medical Gazette*.

[Mr. James, of Exeter, also writes to the effect, that the idea had occurred to him prior to Dr. Simpson's announcement, and that he had recorded it in his private notes, but had not made it public.]

NEW TRACTOR VECTIS.

Under this title, Mr. Ogden describes an instrument, the superiority of which consists in its being used as an extractor, and not as a lever of the first kind, on which latter principle the forceps partly, and the lever wholly, acts. On this account it is less liable to injure the mother and child than ordinary instruments. In appearance it much resembles one leg of the forceps, excepting that the curve is sharper, and the oval ring or fenestra is so shaped as to allow of a secure hold on the chin or occiput. The oblong diameter of the fenestrum is 1 7-8ths of an inch, and the transverse, 1 1-8th of an inch. The rim encircling this is of uniform thickness, and 3-8ths of an inch wide. The mode of applying the vectis in a natural presentation is to introduce it with the convex side towards the hollow of the sacrum, and when arrested by the contact of the curve with the promontory, it is to be carried under the ramus of the ischium to the right or left, as the case may require, pushing forward the instrument in the axis of the ear, and raising the handle, when the curve adapts itself to the chin, and receiving it into its fenestrum, becomes placed in a line from the ear to the vertex.

Mr. Ogden states that he has accomplished delivery with this instrument in several cases of contracted pelvis, and in others where in previous labours craniotomy had been required.—*Obstetric Record*, Feb. 1st, 1849.

MEDICAL REFORM.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I am an old man—long in practice as a surgeon-apothecary—whose humble aspirations have been sufficiently gratified by the position and emoluments resulting from a quiet discharge of professional duties. I have turned with disgust from the violence of medical factions—their publications, their speeches, “full of sound and fury, signifying nothing” to convince me that the changes they advocate would produce the slightest good.

I may be fastidious: but I dislike exceedingly the new designation of “General Practitioners;” a term of equivocal import, that admits of constructions much at variance with the fancied dignity of the gentlemen who assume it. Why do they reject the ancient appellation? All art is honourable; and “the art of the apothecary” is, indeed, time-honored. Above three thousand years ago it was mentioned by the Jewish legislator. It was then an important part of the boasted “learning of the Egyptians.” In our day it cannot *always* be separated from the practice of medicine. The detection of disease and the adminis-

tration of remedies must be associated—at least in rural districts. I have little sympathy with certain fine gentlemen who affect to despise this form of practice, or desire to rid themselves of the name by which it is indicated.

Alas! Sir, "men would be angels;" and a morbid feeling of this sort has vitiated much that was sterling in society. Among agriculturists, where is now the genuine yeoman, who "owed vassalage to no man?" Aspiring to gentility, he clung to a rope of sand; and afforded, as some medical reformers may yet do, melancholy proof that "pride goeth before destruction."

Now, I am quite satisfied with things as they are, and cannot understand what is meant by your correspondent "On Medical Reform" in your last number, when he says, "a vast amount of insult and degradation" has been heaped on provincial surgeons. On occasional visits to the metropolis, I find my way to the College, look over the museum, spend hours in the library, and attend lectures gratuitously. Setting aside the qualification for practice, I deem these advantages cheaply obtained by the twenty-two pounds paid some forty years back for my diploma.

Even the newly created dignity is open to me, notwithstanding my connection with pharmacy. I can rub up a little, and claim examination, but I desire not this for myself; I consider it valueless to the generation with which it originated, though highly important to the next. The education of my sons might have stopped short of University degrees, but for the stimulus of the new charter.

I do not murmur at my own non-election: nothing has been taken from me. I live for my family, and hope they will realize the advantages intended for a higher order of surgeons.

The agitation of the *soi-disant* NATIONAL Institute, as well as that of the party recently sprung up against it, appears to me pregnant with mischief. We have all the protection we require.

I admit the temperate tone of your own articles, and believe that a large majority (the calm and considerate portion) of the members of our Association, find "a head and a home" in existing institutions.

I remain, Sir,

Yours very respectfully,

March 28, 1849.

A QUIET MAN.

PROSECUTIONS BY THE SOCIETY OF APOTHECARIES.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I have very often heard it said, and also have frequently seen it in print, that the Apothecaries' Company would not prosecute any party holding a diploma or degree from any College or University, whether English, Irish, Scotch, or Continental, I want to know by whom the illiberal prosecution in the unfortunate Dr. Lobo's case was brought, whether by the Apothecaries' Company, or the rich and powerful Medical Protection Society, (who have, or are said to have, mustered some 800 members out of 30,000,) or some private party; I think it very illiberal indeed to select a poor foreign medical man, when (taking the most favourable view you

can,) there are at the very least twenty practising druggists to one illegal medical practitioner at the present time; and if the profession want to do any good, stop at once the druggist from prescribing, by a prosecution, and then you will really benefit the medical profession, for the druggists, and druggists alone, spoil half the practice of both London and provincial medical men. There are at present numbers of surgeons with only the College diploma, compounding all their own prescriptions; also numbers of Edinburgh physicians doing the same; and why, I ask, select a gentleman with a foreign degree, when that diploma was obtained after a most strict examination, quite as much so as the examinations here? Why differ one with another of the same profession, when by only stopping the prescribing of druggists, you will at once give an increased good practice to all?

I am Sir, yours &c.,

A CONSTANT READER AND LIBERAL
MEMBER OF THE PROFESSION.

April 9, 1849.

Medical Intelligence.

LIFE ASSURANCE OFFICES.

REMUNERATION OF MEDICAL MEN FOR THEIR REPORTS.

In the list of Life Assurance Offices which have adopted the principle of remunerating medical men for their reports, as given in the last number of this Journal, the London and Provincial Joint Stock Life Insurance Company, 39, Nicholas Lane, London, which started originally on that principle, was accidentally omitted.

ROYAL COLLEGE OF PHYSICIANS.

Gentlemen admitted Licentiates Monday, April 2nd:—Francis Sibson, M.D., London; Augustus Henry Novelli, M.B., Cambridge; John Augustus Tulk, M.A., Cambridge.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates Thursday, March 29th:—Frederick Charles Spackman, Bradford, Wilts; George Bullen, Ipswich; Johnson Kaye Baines, London; John Sherwood Stocker, London; John Moore Swain, Long Clawson.

OBITUARY.

March 15th, at Clapham, Surrey, aged 29, Walter Yonge, M.D.

April 1st, at Liverpool, aged 30, Edward Dunn, Esq., Surgeon, Ulverston.

TO CORRESPONDENTS.

Communications have been received from Mr. H. Williams; the Birmingham Pathological Society; a Constant Reader, &c.; Dr. Ballard; Mr. C. Anderton; Mr. R. King.

We regret that our arrangements did not admit of the insertion of the Petition of the Convention of Poor-Law Medical Officers this week; the petition will appear in the next number.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON SURGERY,

DELIVERED IN THE
MEDICAL SCHOOL OF CAMBRIDGE.

By GEORGE MURRAY HUMPHRY, Esq., Downing
College, Surgeon to Addenbrooke's Hospital.

LECTURE VII.

SUPPURATION AND ABSCESS CONTINUED: HECTIC FEVER.

Treatment of Chronic Abscesses; Means calculated to effect their disappearance without bursting; Artificial opening, valvular, by Trocar; Inflammation of lining membrane; Abscesses of long standing best removed by the Knife; Simultaneous occurrence of Abscesses in various parts of the body, arising.—first, from depressed condition of a part, or of the system, which may have been caused by severe Accident or Operation, or from Cachectic state; Treatment of these Cases;—secondly, from admixture with the Blood of Pus, or other Morbid Matters, occasioned by Traumatic Inflammation of a Vein; Spontaneous Phlebitis not inducing these results.—Hectic Fever; Conditions under which it occurs; Symptoms; Chill, Fever, Perspirations, their relation to one another, and to the general cause; Treatment.

The treatment of chronic abscesses involves many considerations, of which we can now enter only upon a few. I have already mentioned that they occasionally disappear without bursting. This fortunate event is most likely to take place in those very cases in which the abscesses prove most troublesome to heal, if they burst or are opened,—viz., in abscesses occurring in scrofulous or delicate persons, and in abscesses connected with disease of bone, especially if that disease be of syphilitic origin. You know how fatal are psos and lumbar abscesses connected with caries of the vertebral column, when they burst; it is therefore well to bear in mind, that these abscesses sometimes disappear, or remain stationary, for a great length of time. I have seen a few well-marked cases in which the swelling gradually subsided, the spine seemed to become sound again, and the patient recovered his health, although there had been no doubt of the existence of an abscess, and the abscess had been attended, or rather preceded, by the usual signs of vertebral disease. Moreover, in the examination of the bodies of patients who have suffered from disease

of spine, it is no uncommon thing to find the remains of abscesses, which may or may not have proceeded to such an extent as to have presented externally, leaving the appearance of being in a dormant or retiring state. Their walls are, in such cases, thick and tough, and their contents are creamy, putty-like, or even calcareous; we have, therefore, a double reason to beware of interfering with psos and lumbar abscesses; their fatality when they are opened, and the fact of their occasional spontaneous disappearance. The same remark applies to chronic abscesses in general, and particularly to those which occur in delicate subjects, or which are connected with disease of bone in any situation; they are all very slow to heal when opened, and their contents occasionally are removed by absorption. We cannot indeed look forward to this result with any degree of certainty in particular cases, but we should not forget to regard it as a possible event.

The treatment which has appeared to me most favourable to the disappearance of chronic abscesses, has been such as is most conducive to the general health,—exercise in the open air, nutritious diet, cold ablutions, and tonic medicines, together with some mild irritant to the skin covering or near to the abscess,—the application of tincture of iodine, or what is still better, a succession of small blisters. The disappearance of the vertebral abscesses to which I have referred took place in each instance while the patient was allowed to walk about and attend at the hospital occasionally. One of the men followed his avocation as a day labourer during nearly the whole time that he was under treatment. I think the more delicate and scrofulous class of patients who suffer from vertebral abscess have a better chance of obtaining a cure, by the absorption of the pus and the retiring of the abscess, than stronger and healthier persons, in whom the disease is of more accidental nature. The effect of iodide of potassium, and occasionally small doses of mercury, in promoting the disappearance of abscesses depending upon syphilitic disease of bones, is very decided. There are frequently to be seen in attendance, at the out-patient's room, delicate persons with chronic subcutaneous abscesses, unconnected with disease of bone, which are in process of absorption, under measures directed to the improvement of the general health, together with local stimulating applications.

The same general rules apply to the opening of chronic abscesses, which I laid down in the last

lecture, when speaking of the treatment of acute abscesses. The natural opening affords the most favourable vent for the matter, but it is not advisable to allow the skin to become much undermined, especially in the chronic subcutaneous abscess, for these are very liable to be followed by troublesome sinuses and ugly cicatrices, which may often be prevented by a timely incision. As a general rule, subcutaneous chronic abscesses should be opened as soon as the integuments over them begin to be discoloured, for the chance of their disappearance, without bursting, after that has occurred, is very slight. The opening should be free, and care taken not to injure the walls of the abscess by rough manipulation. It may be remarked that chronic abscesses, being accompanied by little inflammation, are in their progress more subject to the influence of gravity, and the mechanical effects of the pressure of their contents, than acute abscesses; they therefore approach the surface of the body less directly, and often travel to a considerable distance without bursting. This disposition to extend in the direction of gravity does not generally furnish a sufficient reason for opening them, because their progress is not attended with much injury to the surrounding parts. We not uncommonly see patients with large abscesses extending from the loins to near the knee, who are able to walk about, and do not appear to suffer much inconvenience.

In the case of a large chronic abscess, which is steadily increasing, and bids fair to approach the surface and burst, we sometimes endeavour to effect a compromise by evacuating a certain quantity of the contents, allow the wound to heal, and trust that the remainder may become absorbed, or that the matter may re-accumulate more slowly. With this view an oblique or valvular incision is made into the abscess, as recommended by Mr. Abernethy; or, (and this plan generally answers better,) the integuments having been divided with the knife, a trocar is introduced obliquely into the abscess. I have adopted this treatment in several instances, and have not seen any ill consequences result from it, but I have generally found that after the operation has been repeated two or three times, the wound does not heal, or the cicatrix gives way, and the abscess takes much the same course as if it had been allowed to burst: occasionally, no doubt, the treatment is more successful. Some of you may remember the man in Maynard's ward, with a large psoas abscess, preceded by the usual signs of vertebral disease, which I tapped with a trocar three times, at intervals of about two months. On the first occasion two pints of pus were evacuated; on the second, a pint only; and on the third, which is three years ago, half a pint of thin fluid was discharged, more nearly resembling serum than pus. After this the fluid re-accumulated a little, but I did not think it advisable again to remove it; the man, therefore, went home, and I learn from his friends that the swelling by degrees disappeared entirely, some weakness in the loins being the only remaining symptom of the disease.

When an abscess has begun to point, or rather, when the integuments at the pointing spot are discoloured,

you cannot prevent the formation of a permanent opening at the part by an incision, or by the use of the trocar; for if an incision be made where the skin is discoloured, the wound will not heal; and if it be made at a distance from the pointing spot, the evacuation of the contents of the abscess in this manner, by a side-door, as it were, will not prevent—will scarcely even retard, its bursting, where it had begun to point. Nevertheless, the artificial opening does no harm, and I think it in some measure diminishes the shock to the system, which is occasioned by the bursting of a large abscess, and the sudden discharge of its contents.

The treatment which I generally adopt in cases of large chronic abscess, connected with disease of bone, such as psoas abscesses, is as follows,—first, I endeavour to promote the absorption of the pus by counter-irritants; I direct issues to be made near the diseased bones, or small blisters to be applied in the neighbourhood of the abscess. The patient is at the same time allowed to go out of doors, if he can do so, and a moderately nutritious diet is given. If, in spite of these precautions, the abscess continues to advance, and to approach the surface, so as to render it probable that it will soon burst, I draw off some of the pus by a trocar, keep the patient quiet for a few days, and then allow him to move about again. The operation is repeated according to circumstances. When the abscess bursts, which generally takes place sooner or later, the patient is induced to get up and move about with crutches, as long as he is able to do so, the limb on the affected side being rested in a sling. By these means the progress of the disease is certainly, for the most part, delayed in its several stages, the hectic period is averted for a time, and an increased opportunity afforded to the constitutional powers of the patient to withstand the enervating effects of the disease, and to carry on the reparative processes necessary for a cure.

It may seem strange to talk of the inflammation of an abscess, but the membrane lining the cavity not unfrequently becomes inflamed after an opening has been established whether by natural or artificial means: more particularly when the abscess is of large size, and when the matter has been roughly squeezed out of it. The part becomes very tender and painful, the discharge scanty, thin, fetid and mixed with blood. The accompanying constitutional disturbance is sometimes severe, the fever being rather of an asthenic character, the pulse very quick, perhaps intermitting, the tongue dry, the skin hot and dry, and the patient restless. Under these circumstances it is important that the opening be sufficiently large to permit the free escape of the new irritating products formed in the interior of the abscess, and much relief is often afforded by enlarging the opening. At the same time warm fomentations or poultices should be applied to the part, and general antiphlogistic treatment adopted, not bloodletting, but antimonials, saline aperients, &c. This train of symptoms sometimes follows the admission of air into the abscess, which causes decomposition of the pus and irritates the lining membrane; but it is more often induced by the escape of blood, which, mixing with the pus, undergoes decomposition and

gives rise to the dirty fetid fluid discharged on these occasions. The effusion of blood may be caused by abrasion of the lining membrane of the abscess, and it is most likely to take place when the patient is much out of health at the time the abscess bursts or is opened. It may be expected, and its ill consequences may be watched for, when the matter which first escapes is stained with blood. In the case now in the hospital, where so much swelling of the limb, with severe constitutional disturbance followed the removal of the contents of a large deep abscess in the thigh, the man was in a wretched state of health at the time, and the fluid which flowed through the opening was thin and of a reddish colour. You remember what immediate relief was after two or three days afforded by a free incision into the abscess, giving vent to a large quantity of dark grumous stuff, which stunk like the contents of a filthy drain.

With regard to the treatment of those abscesses of long standing which are often mistaken for tumours, I believe it is the best plan to dissect them away altogether, provided they be free from connection with great vessels and other important parts, because their walls are often of considerable thickness, and they are lined by a structure resembling mucous membrane, so that they do not granulate freely and heal kindly when they are opened, but sometimes remain as sinuses for years. Besides, incisions into these abscesses are occasionally followed by troublesome inflammation of the erysipelatous kind, in the same manner as is the opening of serous cysts, bursæ, &c.

I must not omit to say a few words respecting an interesting and important class of cases which have been for some time known to surgeons, and have attracted especial attention of late years in this country. I refer to those abscesses which occur in various parts of the body, often in considerable numbers and usually associated with some primary abscess, ulcer, or local lesion attended with suppuration. They have been called metastatic or sympathetic abscesses, purulent deposits, or by other names according to the views which different writers have entertained of their nature and origin. They form a grave addition to the local disorder; and the constitutional symptoms with which they are attended are always very severe, and for the most part fatal. I need not stop to refute the idea formerly entertained, that they are occasioned by the absorption into the circulatory current, of pus from the primary abscess or ulcer, and its deposit in the new situation, for you are aware that the corpuscles of pus cannot thus readily pass to and fro through the walls of the vessels. As I have just intimated, you will find some difference of opinion respecting the nature of these abscesses. By most modern surgeons they are thought to depend upon the presence of pus in the circulatory system consequent on the inflammation of a vein, but they have appeared to me to take place under two very different circumstances; first, (and this division includes I believe, the greater number of cases,) suppuration takes place in various parts of the body in consequence of an enfeebled and depressed state of the system; secondly, it is sometimes occasioned by pus globules or

other morbid fluids mixed and circulating with the blood.

Let us consider the first class of cases a little in detail. Observe what frequently takes place in a limb which has been severely injured. Suppose a bad compound fracture or dislocation with much bruising, where attempts are made to save the limb, but the case goes on badly. In a day or two the limb becomes swollen and discoloured, thin grumous fluid issues from the wound, the extremity below the injury acquires a livid or dark colour, is cold and loses its vitality. Higher up, the limb assumes a dusky red hue, with more or less heat, indicating a state of low inflammation. If this inflamed part of the limb be examined after a short time, it is found to be loaded with serum, and suppuration is discovered to have taken place in various parts. The pus in some places is collected into distinct cavities lined with lymph, in others it is infiltrated into the cellular tissue, or into the texture of the muscles, dissecting and separating their fibres. There can be no doubt in such a case, that the abscesses and the interstitial suppuration depend upon the direct effects of the injury, extending far beyond the apparent mechanical lesion caused by it. The whole limb received a shock, sufficient to destroy the vitality of its lower part, and to induce a low kind of inflammation which was quickly followed by suppuration higher up. We have had of late years several opportunities of witnessing these symptoms following the severe lesions occasioned by railway carriages passing over and shattering limbs. In several cases where amputation was performed above the apparent seat of the injury, the less directly appreciable effects of the shock upon distant parts of the limb were shown in the sloughing of the stumps and the formation of abscesses at various points in the limb above the amputation. In cases where amputation was performed below the knee on account of injury to the ankle or lower part of the leg by a railway carriage, though the parts cut through appeared to be sound, we found that the stump generally sloughed. Sometimes, in addition, purulent infiltration took place into the limb. At others abscesses formed, although the stump did not slough. In one lad who recovered after amputation performed below the knee on account of severe injury to the foot and ankle, I opened three abscesses which formed consecutively in the thigh, and one in the buttock. Neither of these had connection with each other nor with the stump.

Such abscesses are not of uncommon occurrence in a limb above the point at which amputation has been performed under other circumstances, or indeed in a limb which has been the subject of any severe operation or injury. They do not result merely from the burrowing of matter from the wound, because they are often quite unconnected with it, but they must be regarded as a consequence of the impression or shock occasioned to the limb by the severe lesion of the operation, which, felt in the greatest degree in the line of incision, vibrates through the limb, and more or less through the whole system. Abscesses in a limb after operation are most common when the powers of the patient are low, or when, in addition to that of the

operation, the limb has received some previous severe shock, as in the cases of railway injury just mentioned.

But the shock of an accident or an operation is not generally confined to the injured limb, it extends to the whole system, and the effects of the depressed condition occasioned by it are witnessed in various ways, and, among others, in the liability of different organs to inflammation, which soon runs on to suppuration, or it may be to gangrene. How many persons die of suppurative pneumonia, pleurisy, arachnitis, or hepatitis, after severe accidents, operations, or burns. These secondary inflammations and abscesses are most frequent when the strength of the patient has been much reduced by illness before or after the operation, more particularly when there has been erysipelas or much suppuration in the limb. A man received some injury to the right wrist, from a heavy bar of metal falling upon it, traumatic gangrene set in, and the arm was amputated just below the shoulder on the fourth day. Four days after the operation erysipelas attacked the stump, and spread over the shoulder, chest, back, and loins. On the twenty-third day after the operation, when the erysipelas was subsiding, and the stump doing well, he was attacked with pain in the left shoulder, and in the fingers of the same hand, which was thought to be rheumatic. Then he was seized with pain in the right hip and right side of the chest, attended with occasional severe rigors, followed by profuse sweats. An abscess formed on the shoulder, which was opened, and three or four ounces of fetid bloody pus evacuated, affording some relief to the patient. Attempts were made to support his strength with wine, ammonia, bark, &c., but he became weaker. Two months after the operation the right lower extremity became swollen, tender, and painful. An aphthous state of the mouth with diarrhoea followed, and he died six weeks after the amputation. On *post-mortem* examination the stump was found to have nearly united, and the vein was quite healthy. There was a large abscess beneath the right deltoid muscle, another in the course of the right psoas muscle, communicating with the hip-joint the articular cartilages of which had been almost entirely removed. The right femoral and external iliac veins were distended with coagula mixed in places with pus. The right pleural cavity contained a good deal of lymph and pus, and there were small abscesses in the lower lobe of this lung.

These inflammations of distant parts, more especially of the lungs, quickly proceeding to suppuration, softening, and gangrene, are a very common sequence of operations performed upon patients who have been much reduced by previous disease, indeed they constitute the most frequent cause of death in these cases. The following instance of this kind will be remembered by some of you:—A delicate young man, in a very feeble state of health, to which he had been reduced by severe suppurative disease of the knee-joint, was admitted into the hospital for the purpose of having the limb removed. He determined on submitting to the operation, which we did not feel justified in declining to perform, although we could not recommend it to him. The limb was accordingly amputated, with very little

loss of blood. For a few days the case seemed to be doing well, and we had hopes of his recovery, but on the twelfth day he was chilly and feverish, with dyspnoea, and pain about the chest, shoulders, and back; the dyspnoea increased, his strength quickly failed, and he died on the eighteenth day after the operation. The stump was nearly healed, there was a small abscess beneath the upper flap, but the artery and vein were quite sound. Scattered throughout various parts of both lungs were numerous inflammatory patches, with hepatization, and grey, soft, suppurating spots in the centre of most of them. We cannot suppose that in these and other similar cases the secondary inflammations and abscesses are the consequence of an inflamed state of the veins, because those tubes are often quite healthy, and when they are diseased, they are so, probably as the result of the same general cause which gives rise to the inflammation of other parts than as a primary affection.

A similar train of events to those we have been considering may occur, not only after an operation or injury, but in the course of any long-continued disease when the powers of the patient are much enfeebled. The life of a person suffering under cancerous ulcer, profuse discharge from an abscess or compound fracture, is often unexpectedly terminated by inflammation and suppuration or gangrene of some distant part. Inflammatory affections of the same kind are much uncommon in typhus and other low fevers; the pus formed in such cases is generally ill-conditioned, fetid, mixed with gas, and much relief is afforded by its discharge. It now and then happens that the illness takes this turn from the beginning. A servant girl, aged about 17, in rather a weak state of health, was seized with rigors, followed by severe pain in the arms and knees, which were thought to be rheumatic; the general symptoms assumed a typhoid character, with great prostration of strength and restlessness; the pulse was small and quick; the tongue dry, brown, and cracked; sordes collected on the lips and teeth; dyspnoea ensued, with delirium; the abdomen became tympanitic, the bladder distended, and she died within ten days of the first attack. On examination after death we found yellowish lymph and pus in both knee-joints, in the left shoulder, and in the bursæ beneath the deltoid and at the acromion. There were also numerous deposits of lymph and pus in various parts of the liver and in the lungs, those in the lungs being surrounded by vascular ecchymosed or hepatized condition of the pulmonary tissue. The right pleura was coated with lymph. There was no evidence of a wound or ulcer in this case, and no disease of vein or of the intestines was discovered.

It appears, then, that suppuration, diffused and circumscribed, may take place in various parts of a limb, in consequence of the shock sustained by the limb from severe accident or operation. It may occur in various parts of the body in consequence of a shock sustained by the system, or in consequence of the general powers having been reduced by loss of blood, by erysipelas, or long-continued disease of any kind. Lastly, it may occur in persons out of health, in consequence of some low typhoid peculiarity of the fever which attacks them.

Now, this first class of cases in which suppuration

occurs simultaneously in several parts of the body, in consequence of an enfeebled condition of the patient, has been confounded with that next to be described, because the morbid appearances are, in many respects, similar, and because the inflammation is frequently found to have attacked a vein. But I have already said that the veins may, under such circumstances, be regarded as suffering in common with other organs, not as the source of their distress.

The treatment should consist in endeavours to restore the general tone of the system. The abscesses should, if possible, be opened early, for their contents soon undergo decomposition, and the fetid gases resulting therefrom, pent up in the body, add much to the general distress. During the febrile state which accompanies the early stage of the inflammation of the lungs and other parts under these circumstances, it may be necessary to employ antimonials and saline medicines, or to remove small quantities of blood by cupping or leeching. The local depletion may be advantageously combined with nutritious diet and tonics, when the inflammation is unaccompanied by fever. We cannot often boast of success in the treatment of these formidable cases, but, as a few have recovered, we should not give them up in despair. Much may undoubtedly be done to prevent the occurrence of such disastrous events by attention to the general health of the patient, by not delaying operations till the powers of the system have been too much undermined by the local disease, by care in preventing unnecessary loss of blood during an operation, and by avoiding too lowering a diet afterwards. By closely watching your patients, and attending to the earliest symptoms in suspicious cases, you may sometimes arrest the inflammation in its first stage, and prevent its destructive effects; remember that those destructive effects very quickly ensue, and that the time during which treatment is most likely to avail is very short.

In the second class of cases the purulent formations in various parts of the body appear to depend upon the admission into the circulating current of pus or other morbid fluids which, passing with the blood into the different organs excite inflammation of them. It is probable that the effects of the inflammation thus induced may vary according to the qualities of the noxious fluid circulating with the blood. Dr. Budd, in his treatise on diseases of the liver, adduces cases to prove that the septic agency may be introduced into the blood from a part in a state of gangrene, the noxious matter thus disseminated destroying the vitality of the tissues on which it acts most strongly. The supposition is worth bearing in mind, though the circumstances of the particular cases recorded are perhaps explained equally well by the depressed condition of the patient which accompanies mortification in one organ, rendering him liable to inflammation and mortification in others.

Mr. Arnott and other writers have clearly shewn that the scattered abscesses and inflammations which occur after injuries are occasionally connected with an inflamed state of the vein near the injured part, and depend upon it as their cause. Cases have frequently

occurred in which, during inflammation of a vein caused by the wound in venesection, tying a vein for the cure of varix, or a ligature placed upon the vein after amputation, symptoms have arisen similar to those I have described to attend the occurrence of inflammation and abscesses in various parts from other causes. The patient is seized with a succession of rigors and sweatings; a kind of low typhoid fever ensues, with quick pulse, dry brown tongue, sallow sunken countenance, &c. Dyspnoea, with pains in the joints and limbs occur; and after death, inflammation and suppuration, diffused and circumscribed, are found to have taken place in the lungs, liver, joints, bursae, or other parts. These alarming sequelae of the inflammation of veins are now so well known, that the apprehension of them has led to a discontinuance of many of the operations on veins which were formerly practised. They are supposed to be occasioned by the escape of pus from the inflamed vein into the circulating current. The pus and blood being intermixed flow on together, but the pus globules which are generally larger than the blood-globules, become arrested in the narrow capillary channels, give rise to inflammation, and so occasion the formation of abscesses.

The mode of formation of these abscesses has been illustrated by the experiment of injecting quicksilver into the crural vein of a dog. For the first day or two the animal suffered no inconvenience, but afterwards it became feverish, had cough, difficulty of breathing, and died. On examination, the lungs were found studded with small abscesses, in the centre of each of which was a globule of mercury. The mercury, in the same manner as the pus corpuscles, being arrested in the capillary tubes at various points, became the exciting cause of the inflammation, which was circumscribed around the spots where the irritating substance was detained.

These inflammations and abscesses in distant parts are occasioned almost exclusively, if not quite so, by the phlebitis which follows the wound or injury of a vein. They are very rarely, if ever, the result of the inflammation of a vein arising spontaneously. I cannot tell wherein consists the difference between spontaneous and traumatic phlebitis, which occasions so important a disparity in their effects upon the system. I do not think that the subject of spontaneous inflammation of the veins has attracted so much attention as it deserves, for I am sure it is of more common occurrence than it is generally supposed to be. I have observed it in a considerable number of instances, and under a great variety of circumstances;—in the latter stages of fever, of pleurisy, and of phthisis;—in cancer and in long continued illnesses of various kinds; most frequently in the veins of the lower, but occasionally also in those of the upper, extremities. You have lately seen both femoral veins inflamed in a case of disease of the hip-joint, and in a patient who died with malignant disease of the scrotum. Though a serious addition to an illness, the disease is by no means necessarily a fatal one, for I have known several persons recover completely from it. It occurs most particularly in patients whose strength has been

greatly reduced by any long continued depressing cause; that is to say, it occurs under nearly the same circumstances with the purulent deposits, which I described as constituting the first class of cases of that kind. Hence it is sometimes associated with those abscesses scattered in different parts of the body, which owe their formation to an enfeebled state of the system. They more commonly precede than follow it when they occur in the same person, and as I have already said, do not depend upon it. In the first cases of spontaneous phlebitis which particularly attracted my attention, I was somewhat apprehensive of the terrible consequences of the admission of pus into the circulating fluids, and watched carefully for the symptoms of inflammation of the lungs and other parts; but I have not known these symptoms to follow in a single instance, so that the disease has for some time ceased to be a cause of alarm to me on that account.

I have no remarks to offer to you in reference to the treatment of these secondary abscesses following inflammation of a vein. You must meet the various symptoms as they arise according to circumstances, but the prognosis is always very unfavourable.

I do not know that I can take a better opportunity than the present for speaking to you of hectic fever. Not that it has any necessary relation to the subject we have been considering, but because it is more frequently associated with suppuration, and the continuance of purulent discharge, than with any other kind of disease.

Hectic fever consists of a peculiar train of symptoms occurring in cases of great debility, when the powers of the system have been exhausted by protracted illness, by phthisis, a discharging abscess, or a suppurating joint. It is most marked in the early periods of life, and when the disease under which the patient suffers is attended with suppuration, and much discharge of matter. It is not so constant an attendant on malignant affections, which is probably owing to the fact, that in cases of malignant disease, even in the latter stages of the complaint, there is greater vigor of constitution, less weakness and relaxation of body, than in those diseases where hectic is a more frequent accompaniment.

The symptoms of hectic are observed to take place in the following manner:—The weakened wasted patient, with pale face, and small quick pulse, is easily excited; the face is flushed after meals, during conversation, or on the sudden arrival of a friend; this is noticed more particularly towards the latter part of the day, indeed, it may take place every evening, and may be sufficient to keep the patient awake till past midnight. During this period of excitement the skin is hot and dry, the pulse is quickened, and there is thirst, perhaps delirium at night. Sometimes the febrile excitement thus spontaneously occurring is preceded by a slight chill, but the chill is not usually observed. When the fever begins to subside, the patient falls asleep, and wakes up in an hour or two bathed with perspiration, which appears first, and in greatest quantity, upon the head, neck, and chest. He now feels cold and languid. He falls asleep again to wake in a short time in the same very uncomfortable condition, and this goes on till morning. Perhaps he is fortunate enough to sleep

on till the morning, or the perspirations may not commence till then. The urine passed in the morning, as well as on the previous night, is high-coloured and turbid, from the deposit of lithates.

When the three phenomena of hectic, (the chill, the fever, and the perspiration,) are present, they follow one another in regular order, and stand in the relation of cause and effect, in the same manner as in ague. The hectic fit is then not unlike an attack of ague. In both there are more or less complete intermissions of the symptoms, and both depend upon an enfeebled state of the body. But in hectic the symptoms are less regular in the time of their appearance, and are more easily induced by slight exciting causes. In ague, the chill, the fever, and the sweating, are proportionate to one another; the two latter do not occur unless they are preceded by the former, and the patient is greatly relieved by the sweating during which he feels comfortably warm. In hectic, on the other hand, the chill is generally wanting, the sweating is mostly the predominant symptom, and often takes place profusely without being preceded by either the chill or the fever, so that it clearly has no necessary relation to either of them. When the chill and the fever occur, by further weakening the patient, they predispose him to the sweating, but they do not generally induce it, unless he falls asleep, whereas he often wakes in a perspiration without having felt any preceding fever or chill. Hence we may assume that the relaxed condition of the body induced by sleep stands more nearly in the relation of direct cause to the sweating than does the fever.

Perspirations, then, constitute the leading feature of the hectic state—perspirations occurring at various times, without the ordinary exciting causes, and unaccompanied by a proportionate sense of heat. Now, undue perspiration is generally to be regarded as a symptom of a weakened condition of the frame. The strongest persons perspire least during exertion. The appearance of moisture on the forehead and lips is one of the symptoms of commencing faintness; a cold clammy sweat generally accompanies a prostrate condition of the body, and tells us that the system is labouring under the depressing effects of some shock,—a fright, or a fractured limb; and the continuance of this symptom informs us that some more severe injury has been sustained, from which the vital powers are unable to rally,—a bowel has been ruptured, a lung perforated, or a liver contused. The hectic perspirations result, in like manner, from the enfeebled state of the patient, and take place most especially during the relaxation of sleep. They are to be regarded, therefore, merely as an evidence of weakness, and not as a symptom of any particular kind of disease. They are by no means uncommon during convalescence from illness, and need not, under such circumstances, excite your alarm, or induce you to apprehend that some seeds of mischief are lingering behind. They frequently happen from sheer debility without any apparent local disease, and a tonic regimen, particularly exercise in the open air, in a carriage or on horseback, or residence at the sea side, will, in such cases, generally effect a cure.

The other features of hectic, namely, the chills and fever which sometimes precede the sweating, are, like it, merely indications of a weak state of body; they show that the system is easily depressed, or easily excited. The change of temperature encountered by passing from one room to another is enough to cause a chill, and the reaction from that chill, the slight stimulus of a meal, or the increasing warmth of the body towards evening, may be sufficient in these delicate frames to light up a fever, which, subsiding in a short time, leaves the patient in a state of depression corresponding to the excitement, a state most favourable to the occurrence of sweating. I think that fever precedes the sweating chiefly in cases where, besides the general debility, the system is chafed and fretted by some advancing local disease, such as a phthisical lung, or a suppurating joint. But there is not on that account any need to resort to the somewhat unintelligible Hunterian hypothesis, that "hectic is a sympathy with the operation of an incurable disease, where the constitution is conscious of the inability of a part to effect a cure." We have seen that the most constant symptom of hectic—the sweating, is a common attendant upon extreme debility, in whatever manner induced, a local disease being by no means essential to it; or if a local disease be present, it is not necessarily incurable because hectic supervenes; and the less constant symptoms of hectic—the slight fever, and the preceding chill, may in like manner be attributed to the general weakness; for excitability, no less than the liability to depression, is usually proportionate to debility.

The weak and relaxed state of the frame in which hectic sweats occur is very favourable to suppuration, so that abscesses are often observed to discharge profusely, and tubercles to soften quickly, during this condition. A variety of other affections are also incidental to this state, and sometimes alternate with the perspirations, such as diarrhoea, erysipelas, inflammation of the veins, &c.

The treatment of hectic consists in the employment of various means adapted to promote the general health, and invigorate the system. I need not say that they are frequently unavailing. Our resources have commonly been expended in the endeavour to prop the tottering frame before it gives this indication of its approaching fall. The disposition to fever makes us fearful of the employment of stimulants, because we know that a greater depression, with perspiration, will follow the excitement produced by them, and the administration of tonics is likely to occasion diarrhoea and sickness. Exposure to the air gives cold, and we have little hope of arresting a local disease which has wrought such havoc on the system. These remarks are intended to apply particularly to hectic supervening upon an advancing local disease, for I have already said that hectic, unattended by local disease, or occurring during convalescence will generally yield to tonic regimen and exercise in the open air.

In the early treatment of a local disease which promises to be protracted, and to be attended with hectic, be careful to husband your resources. Do not

begin the administration of tonic medicines, and a more liberal diet, because the patient is likely to become weak, for if measures be taken while the strength remains unbroken they are rather likely to do harm; at any rate, they soon lose their effect, and you have not then this resource to fall back upon when the disease really begins to tell upon the constitution; rather endeavour to maintain the general vigour by the natural tonics, fresh air, and exercise; and when the health shows signs of failing, the judicious employment of quinine and iron will often, for a time at least, avert the threatening evil.

ON THE

MEDICAL AND GENERAL TREATMENT OF LOCAL DISEASE

IN PREFERENCE TO OPERATION.*

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III.—TUMOURS.

The propriety of extirpating morbid growths is a question, the determination of which is often as difficult as it is important. I propose to enquire generally into the circumstances which justify excision, and to point out also the indications which decidedly interdict the interference of manual surgery.

The question embraces a wide field of practice, and includes diseases of various character and seat. Almost every writer has accordingly classified, or at least segregated, these diseases before determining their treatment. I propose rather to speak of them in the mass, regarding them simply as diseases occupying any locality which can be reached by the knife, or by escharotics, deducing the indications of treatment from certain circumstances connected with their history and pathology, which may belong to all or any of them, whatever be their nature or situation. This is the way we treat internal disease. One drug is not good for the brain, another for the lungs, and another for the liver. The condition of an organ in relation to the other organs and to the general circulation, is the question which determines one treatment far more generally than the anatomical position of the organ, or even than its nature, which may consist of inflammation at one period, and effusion, suppuration, or morbid growth at another. It is desirable that this *medical* principle should be brought faithfully to bear on the management of local diseases. The knife and the caustic of the surgeon are but as the drugs of the physician; the propriety of their use is not determined by the nature of the disease, be it scirrhus, fungous, or fibrous, nor by the part or parts affected, but by the state of the general system. There is one grand principle which should never be lost sight of in the prosecution of this momentous enquiry: *the origin or cause of a morbid growth, where it can be satis-*

* Continued from page 544 of last Volume.

factorily ascertained, should have great influence in determining the question of extirpation.

Impaired health is manifestly the cause of a large majority of tumours. When the health is obviously deranged, and especially when it had begun to fail previously to the appearance of the tumour, excision will generally be attended with no advantage whatever; and this indication will have yet more force when the health has become impaired from obvious causes, such as impure air, extremes of temperature, intemperance, excessive fatigue or anxiety, or any other known sources of exhaustion or disease. Hereditary tendency, when its existence can be fairly demonstrated, (not when the fact is only assumed, as is too frequent,) must also be borne in mind.

When disease makes its appearance under these circumstances, no sensible man ever thinks of the knife any more than he thinks of extirpating the kidney in diabetes, or the lung in phthisis. Whether the disease partake of the character of scrofula, cancer, or the many kinds of undefined, and almost nondescript tumours which are met with in daily practice, the first question is, can the health be restored? And this should be attempted first by placing the patient, if possible, *in circumstances favourable to health*. The air, the diet, the employment, the clothing, and the general regimen, are all to be considered in our endeavours to place the patient in a position in which the system may be enabled to right itself, and by restoring healthy action throw off the morbid incubus. It is thus that strumous tumours disappear at the sea side,—it is thus that diseases which have eluded the ordinary appliances of surgery and medicine have yielded to the bold enormities of hydropathic quackery; the change of air and of diet are the real sources of health. Next to the proper regulation of the “non-naturals,” (as they were absurdly called,) comes the question of medical treatment. The stomach and bowels, or the liver, or the skin, or the kidneys, or the uterus, or all of them together, may require a little help from this quarter, and when their functions are rectified, the local disease will commonly yield, but if it still remain persistent or advancing in spite of an *apparent* restoration of the general health, then the question of excision begins to assume a more tangible form. Excision seems desirable, for the purpose of preventing further growth, or the subsequent failure of the health from the pain or irritation of the tumour. *But, will it cure it?*

If the tumour is visibly increasing (the very circumstance which frequently determines the surgeon to operate,) it is very probable indeed that the operation will do harm rather than good; but this question will be more conveniently considered by regarding the circumstance of this supposed case as equivalent to those in which a tumour exists and *grows* without any *previous* or *present* derangement of the health,—that is, when the patient *looks* well, and where the functions are properly performed, and where there is no local external source of irritation or cause of disease. Now here, if the disease can be proved to be purely of local origin, away with it at once. But how can

this be proved? To this it may be replied, that extirpation has sometimes cured such tumours, and for years subsequent to the operation they have not re-appeared. The fact is admitted; but does it follow that the disease had a local origin, and that *therefore* excision should be the *rule of practice*? It appears to me that there is an illusion, or at least a fallacy, in this reasoning, which leads to a great deal of erroneous practice, and this view of the case is supported by facts. Many of these tumours thus extirpated, under circumstances of apparently good health, do return, and often with increased energy, sometimes becoming malignant and destructive to life. A farmer's bailiff had a tumour on the lower lip, which had existed nearly two years, growing slowly, and attended with little pain. His health was apparently excellent, his complexion ruddy, and his habits temperate. I extirpated the tumour, the wound healed in a few days, and an absorbent submaxillary gland, which had become enlarged, was soon reduced to its natural size. The patient left the neighbourhood in a month; five months afterwards I heard that he was dead. The tumour had returned in an active and malignant form, and had rapidly destroyed him. These cases are common—much more common than hospital surgeons are aware of. A patient is operated on in the hospital, leaves it apparently well, and is entered cured, but he dies in the Union in a few months, the tidings of his death never, of course, reaching the ears, either of the operator, or the dresser. “The man is a pauper whom no one knows.”

But if extirpation, as has been admitted, is sometimes successful in these cases, how is this to be reconciled with the theory of a constitutional lesion? Very easily. Many of these tumours are depositions from a process of chronic inflammation, which may be arrested by the repeated application of a few leeches, which being accomplished, the absorbents remove the tumour. The same result may sometimes be obtained by general blood-letting, and a few doses of Plummer's pill. Surely it is not irrational to infer that the operation of excision is often attended with sufficient hæmorrhage to destroy the inflammatory diathesis, and with it the tendency to disease, and that when the bleeding is insufficient for this purpose, or when there is latent cachexia predisposing to morbid action, the disease re-appears. The therapeutic inference is, therefore, upon the whole, in favour of constitutional treatment combined with local, in preference to the scalpel. When these tumours occupy structures subject to the invasion of carcinoma, it is by no means necessary, or even desirable, to entertain the question whether they be cancerous or malignant, nor is it possible, in many cases, to decide the question in the earlier and curable stages; they should be regarded simply as morbid growths, which *may* become malignant, and which can never be safely removed without previously rectifying the general unsoundness which develops them.

When the health is apparently sound, and the tumour is neither painful nor tender, nor progressive in magnitude, it may be inferred that the health is

really good, and that the neighbouring absorbents being habituated to the presence of the tumour, are, so to speak, reconciled to it, and refuse to take it up. In this case it may be removed, but whether by excision, by caustic, or by topical applications of iodine or mercury, may be determined by its seat, in some cases; in others, the plan which will be likely to leave the smallest scar should be adopted.

The existence of a plurality of tumours at a distance from each other, in a similar structure as in both mammae, or even in dissimilar structures, as in the lip and mamma, should always be considered as decisive against an operation. One and the same cause will generally be found to have originated both, and the proper treatment consists in removing the cause, which may be accomplished by rectifying the general disorder of the system. Salines, with the mineral acids, blue pill, sarsaparilla, iodine, and arsenic, are the medicines which will generally be found most efficacious. When the secretions are healthy, and there is no serious failure of the health, arsenic given internally, on a full stomach, and iodine in the form of ointment externally, will often accomplish the slow, but final, absorption, of many of these morbid growths; but the alterative treatment must be modified by the constitution of the patient, and its success will depend much upon the intelligence with which it is adapted to the peculiarities of the case.

There are some tumours which form exceptions to the above rule, their peculiar locality requires peculiar treatment. Tumours in the eyelids for example, often have their commencement in some accidental local cause of irritation, and grow by friction. They should always be removed by the nitrate of silver, *never by the scalpel*. The same may be said of tumours in the inside of the cheeks and other parts, the mechanical movements of which promote their growth. Those pendulous tumours growing from a small neck, called *polypi*, do not generally denote disordered health, but appear to grow from some local or mechanical cause. It is difficult to account for their origin, but their growth may be dependant upon the elasticity of the arteries in the neck of the tumour, which, by pressure on the contiguous veins prevent the free return of the blood distributed to them. Hence they become partially distended, organization gradually proceeding. No one disputes the propriety of tying the neck or twisting them off from their attachments.

There are perhaps a few other cases in which excising may be required. For instance, when it is certain that the health is suffering from the irritation of a tumour, from its pressure on vital or important organs, from its excessive pain, or from any local or mechanical interference with healthy functions. The most difficult cases to decide upon are those in which the health suffers both from an originally malignant taint, and from the constitutional irritation of the local disease. Amputation affords temporary relief in some instances: in the majority it only aggravates the sufferings and precipitates the death of the patient. In Dr. Walsh's invaluable work "On Cancer," he has proved by statistical enquiries that "the chances are, that extirpation either proves fatal at once, or is followed by reproduction of

the disease within twelve months," and that extirpation of cancerous growths by the knife can neither be regarded as a means of curing cancer, nor of prolonging the existence of persons affected with the disease." This melancholy conclusion should surely excite great caution in the use of the scalpel in every kind of morbid growth depending upon impaired health.

The conclusion which may be drawn from this very cursory view of the subject, may be summed up in few words:—

The extirpation of morbid growths may be said to be *indicated*, (their position being convenient for operation,)—1. Wherever the disease is clearly the result of local or mechanical irritation from some external source. 2. Whenever the tumour is neither painful, tender, nor progressive, the health being good. 3. Whenever it can be fairly demonstrated that the pain or irritation of the tumour being the primary and sole cause of disturbed health, its removal will be the least of two evils. 4. A tumour in the mamma, originally depending on disordered health, may, *after the health is restored*, become painful from the pressure of the dress, and thus the absorbent glands may be excited and the uterine functions disturbed. Excision may be justifiable in such a case; but the proper time must be chosen, and great attention should be paid to the health subsequently,

The extirpation of morbid growths may be said to be *contra-indicated*,—1. When failing health precedes or accompanies the appearance of local disease. 2. when the disease is advancing, the tumour sensibly growing, no local or mechanical cause of irritation being apparent. In this case it is right to assume the existence of latent constitutional disease, and to treat the case medically rather than surgically. 3. When there is a plurality of tumours. 4. When the disease reappears, whether soon or late after an operation for its removal.

The reader will observe that these rules contain little reference to the condition of the absorbent glands connected with the tumour, although surgical writers of the highest eminence have generally pointed out this circumstance as the one grand distinction which indicates or interdicts excision. Swollen axillary glands have always been held to be a strong objection to the removal of a tumour in the breast; and on the other hand, a healthy condition of these glands, has been admitted as a proof that the system is not contaminated, and that therefore the disease may be extirpated by the knife. Against this doctrine, (which appears to have been adopted by surgeon after surgeon from preceding writers without much reflection,) I must enter my most earnest protest. Nothing can be more fallacious in theory or unhappy in its practical results. Nothing is more common than the enlargement of the axillary glands from inflammation of the fingers, as in whitlow, or the introduction of any irritating matter or animal poison into the fingers. Yet, who infers from this circumstance, that these glands are the seat of incurable disease? They become irritated and swollen: but the irritation and swelling subsides spontaneously as soon as the exciting

cause is removed. On the other hand, malignant disease may pervade the whole system, and become developed in the mamma or any other organ, and exist in the form of a tumour for months together, the health evidently giving way, while the absorbent glands remain unaffected. The conclusion is, that it is not always advantageous or safe to amputate when the absorbent glands are sound; nor, when they are swollen and tender and inflamed, do they present any absolute proof that the whole system is contaminated. In those cases *where the question of excision can be entertained at all*, it is impossible to tell whether this secondary affection of the absorbent system be merely the effect of irritation, or an actual extension or translation of malignant diseases. How, then, can any thinking man regard it as an important indication for or against an operation?

Happily, hospital surgeons are becoming at length practically alive to the fallacy of this distinction; and it is one of the most pleasing features of the improved condition of modern surgery, that the treatment of morbid growths by extirpation, is now the *exception*, and not, as formerly, the *rule*.

The medical treatment of morbid growths, and the efficacy of alteratives in arresting their advance or destroying them altogether in cases unfitted for operation, will form the subject of a future paper.

Dec. 12, 1848.

CLINICAL ILLUSTRATIONS.

CANCER AND FIBROUS TUMOUR OF THE UTERUS: CASE AND REMARKS.

By EDWARD BALLARD, M.D., Leamington,

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Having been induced to offer as the first of my clinical illustrations a case of an unusual form of uterine disease, it may be as well for the present to confine my observations to such affections of the womb and its appendages as have come under my notice and treatment in the course of my Dispensary practice; in doing so it shall be my endeavour to select from among the unpublished cases which I have collected, those which on the one hand I have had the opportunity of recording with the greatest exactitude, or on the other which appear to illustrate important facts in pathology or practice. Nor shall I consider any apology needed on account of the details which I may think it desirable to enter into, believing as I do that there is no fact which well observed may not be without its value, and that if from circumstances it is not appreciated fully by myself, it may be of such a nature as to fill up some important hiatus in the reasonings of others.

CASE.

Injury to the Trunk; Menorrhagia; Abdominal Tumour; Vaginal Discharges; Involuntary flow of Urine; Death.—Post-mortem examination:—Fibrous Tumour; Scirrhus; Encephaloid and Fungus Hematodes of Uterus; Ovarian Tumour, &c.

This case was seen during life by my friend and colleague Dr. A. P. Stewart, who, after death gave me the opportunity of making an examination of the body. The following history I draw up from information derived from the patient's sister and a woman in whose house she resided, and it was kindly corrected by Dr. Stewart from what he recollected of the symptoms.

M. A. L., aged 42, a native of Norfolk, but having resided ever since she was twenty years of age in London, where she has lived upon the town during all that period as a common prostitute. The court in which she lived was one of the closest and most unhealthy in St. Pancras parish, and inhabited almost entirely by the class of persons to which she herself belonged. She was the eldest of eleven, and lost two brothers of consumption, one at the age of 19, the other at that of 23 years. She became a patient at the St. Pancras Dispensary, under the care of Dr. Stewart, very shortly before her death.

Although an inveterate spirit drinker, she had always had sufficient wholesome nourishment, and up to nine years ago is said to have enjoyed a good state of health. She had one child shortly after she came to London. About nine years ago a cab knocked her down in the New Road, and the wheel passed over her body. She seems to have considered herself at this time in the family way, but upon this there prevails some uncertainty. From this injury she used to date all her ailments, although it appears probable that previously she had been subject to occasional flatulent pains and swelling of the belly, which eructation always relieved. However, from the time of being run over, she was subject to menorrhagia, often of a month or six weeks duration, blood coming from her in clots. For the last four or five years and more, especially for the last three, she had noticed the abdomen to be enlarging to a degree quite unusual to her, and this, too, principally at the lower part; and she complained from time to time of the food she took disagreeing with her; and two years ago she began, for the first time, to complain of twisting pains, "as if her intestines were being tied into knots." In the month of February last year, (this report was drawn up in September, 1846,) she began to complain in addition of darting pains at the bottom of the belly, and swelling of the legs, which induced her to place herself in the Middlesex Hospital, where she was told that there was "a tumour in the abdomen." Being of a very reserved and uncommunicative disposition, it is highly probable that the pains she suffered had lasted for a long time before she made any complaint of them to her neighbours, and then did so only when their severity extorted it. She never suffered from any remarkable vaginal discharge till twelve or eighteen months before her death. About a

week before last Christmas she became unable to hold her urine for the ordinary period, and only passed it in small quantities at a time. She also told her sister that "a substance had come from her like bone and flesh," but she was frightened very much at it, and had thrown it away without further examination, and at the same time she suffered pain around the umbilicus and at the bottom of her back. Four months ago the vaginal discharge became very abundant and offensive, and her strength was reduced, but not extremely so. From six to nine weeks before her death, a black substance was discharged by the vagina three or four inches in diameter, which, according to the testimony of some one who saw it, resembled very much the matter found in the uterus after death, since then she appeared to have lost all control over her bladder, the urine passing from it constantly and involuntarily. At Christmas, too, her complexion began to assume the cancerous tint, and she began to lose her flesh. About a month or three weeks before her death there appeared some œdema of the ankles, which slowly extended to the thigh. She did not take to her bed, however, till three days before she died, during which time she lost her appetite, and passed her stools involuntarily. For the last nine days the odour of the discharges from the vagina was exceedingly offensive. She used to complain to Dr. Stewart very much of pain in the scapulæ. She never was sick or vomited, and her bowels were regular throughout. During the last three days that she was in bed she drank excessively of spirits and laudanum. She died on September 5th, 1846.

Examination of the Body fifty-nine hours after Death.—General, but not extreme, emaciation. Below the umbilicus there appeared a somewhat conical projection, occasioned by a tumour in the abdomen, which became much more obvious on handling it, and was manifestly of irregular outline; it was felt to extend upwards as high as the umbilicus, and laterally to within three fingers' breadth of the iliac spines, being most prominent in the middle line, and receding towards the sides, approaching the right, nearer than the left, ilium. The irregularity of outline was most remarkable on the right side and upper part, where it felt tuberos. It was moveable to a small extent; percussion over it elicited a dull note, becoming, however, rather less so towards the sides. Resonance pretty natural over the upper half of the abdomen. On laying open the abdomen by a vertical incision, the tumour was displayed, occupying the space between the pubes and the umbilicus, and descending into the pelvis, having on its right side the enlarged and diseased ovary, and being covered by the omentum which was adherent to the surface of the latter. The tumour did not adhere at all to the abdominal parietes. It consisted of the enlarged and diseased uterus, to which the left Fallopian tube was adherent along its left border, as also was the left ovary. The uterus, when removed, measured ten inches in length, and six inches in width, at the widest part. Its surface was even and smooth anteriorly, but presented tuberiform elevations at, the fundus, and posteriorly; two, hard and bony, imbedded in the tissue, projected at the top. They were about three inches in diameter,

and there were smaller tumours posteriorly, of about the size of a marble or walnut. The cervix uteri had completely disappeared, and the os was dilated to the extent of about two inches in diameter, its margin being thin, flabby, and congested, and it displayed within the uterus a dark-brown mass. On laying open the cavity of the uterus by a vertical incision on its anterior surface, it was found to contain a mass of fungus hæmatodes, which was not adherent anteriorly to the wall of the organ, but posteriorly and laterally was connected with irregular projections, of various sizes into the cavity, of cerebriform cancer. The mass of fungus hæmatodes was of a very dark reddish-brown colour, breaking down under the finger, but still presenting an amount of cohesion, which was greatest as it approximated to the cerebriform masses. In parts it broke down on pressure, into a dirty grumous liquid. It appeared to be in masses, which were connected to one another by films and thin cellular bands, pretty easily broken down, and these masses, when cut into, were seen to be rather granular on the section. The cancerous masses projecting into the cavity, when cut into, were found to be soft, traversed by numerous bands, and to present much the appearance of the surface of an infant's brain. In no part did this matter reach the outer surface of the organ. Some few flaky little pieces of bone were picked out of the hæmorrhagic mass near its attached portion. The tumours which projected externally were of two kinds; some of the smaller exhibited, on section, the aspect of scirrhus cancer, and exuded a cancerous juice on being scraped; others presented a structure similar to that of the two large tumours of the fundus. The latter were united by what appeared to be scirrhus texture. The largest was about the size of a duck's egg, oval in form, and consisted of a mass of fleshy-looking matter, fasciculated like muscular tissue, and pale, as if rendered so by a short maceration in water. This matter was enclosed in a flexible fibrous cyst, containing patches of calcareous matter. At one end of it was a small entirely calcareous cyst, of about a line, or sometimes more, in thickness, enclosing a similarly fibrous matter, but dense, and less like muscle, of a pale yellowish tinge, and drier than the former; it was evidently of longer standing than the greater part of the tumour. The other tumour which lay beside it was of a rounded form, and appeared to consist of several, aggregated and united, the walls of all being very dense and calcareous, and the enclosed fibrous or fleshy-looking matter varying from a pale red to a yellowish colour, and being denser, and of a drier texture than that before described. A smaller tumour appeared in a transition state; its cyst was partly osseous and partly flexible, the enclosed matter being denser and yellower near the former, and redder and more flesh-like near the latter, portion. None of these tumours reached the peritoneal surface of the womb, and although causing considerable projection, they were covered by a layer of hypertrophied uterine tissue. The general tissue of the uterus was hypertrophied, even where not diseased; the thickness of the anterior wall near the fundus was nearly an inch, and it thinned off gradually towards the dilated os.

The right ovary was converted into several masses similar to the fibrous tumour of the uterus, each more or less completely enclosed in an osseous cyst, the side of each tumour most ossified being denser also, and yellowish in colour. The kidneys were rather smaller than natural, very flabby and watery, very pale, and the cortical portion much diminished in width. There was nothing deserving record amiss with the other abdominal or thoracic organs. The cancerous tissue was submitted to microscopic examination. The brown hæmorrhagic matter in the cavities presented long and short caudate and spindle-shaped cells, as well as others which were round, compound, and nucleated—granules and blood-corpuscles in various conditions. The blood corpuscles and caudate spindle-shaped cells were not seen in the encephaloid matter. They were seen, however, in the fluid scraped from the scirrhus, along with crystalline matters and fibres.

REMARKS.

Pathology.—1. The limitation of the disease to the womb, although it there produced the most tremendous ravages, is a fact generally observed in cancer of this organ. If we may rely on the small number examined by M. Ferrus, a little more than a fifth alone have presented, in addition, a secondary cancerous complication. My own experience leads me to coincide in this respect with the general statement. I have, however, in one case met with uterine cancer occurring secondarily to cancer of the mamma, a thing so unusual that their union in the same person is generally denied. 2. The part of the organ affected was remarkable. The cervix, as every one's experience can testify, is the most common seat of cancer of the womb; at any rate, if the body be diseased, it becomes so by the spreading of the adventitious growth from the former part. Here, however, the cervix was free, and the body was the only part which suffered. The posterior wall, too, was alone affected. Persons accustomed to dissect cancerous wombs are aware of this disposition of the posterior part of the body to take precedence of the anterior in presenting the morbid change, and the same tendency is noticed in the posterior lip, where the cervix is the part attached. The outer layer of the uterine tissue again was free from cancerous deposit, as if the disease had commenced on the inner surface, perhaps, in the submucous tissue, or in that part of the wall which was nearest to it. The freedom of the anterior wall was the more remarkable, that there was no trace of disease on its inner surface to indicate that it had lain so long in contact with the fungous mass which projected from the posterior. 3. The unusual combination of scirrhus with encephaloid, the latter the more unusual of the two varieties which affect the womb, the occurrence of colloid in it at any time being exceedingly doubtful. The fungoid and hæmorrhagic growth of it from the interior of the body, so as to form a soft tumour, distending its

cavity, is very uncommon; it was the "fungus hæmatodes" of Hey and others, and nothing more than an accidental condition of the encephaloid matter. 4. The co-existence of the fibrous tumours with cancer of the uterus deserves a few observations. It is common to find them together, and it would be a matter of much interest to determine in what relation they stand to one another. In the present instance everything connected with their anatomical peculiarities, and with the history of the patient's ailments, would lead to the belief that they had preceded the development of the cancer; they presented distinctly two periods of formation, the more recent, perhaps, was simultaneous with that of the cancer. It happens about as often that the fibrous growth succeeds the cancerous, and this not of the uterus or ovaries alone; but judging by my own experience, of the pylorus, or other abdominal or more distant organs, I have found it occur more rarely as a solitary affection, than in conjunction with cancer or other tumours in important organs of the body. I would not, however, be understood as believing that the fibrous tumour has any generic similarity to the cancerous, or that it exhibits any special disposition to assume a cancerous character, as an after-phase of its development; on the contrary, it has its own modes of morbid progress, one of which is illustrated in the case under consideration. Still the coincidence of the two kinds of growth is highly interesting, especially when we keep in mind that the only element necessary to convert a fibrous, into a scirrhus, tumour, is the interstitial deposition of cancer-cells. I make no allusion to the arrangement of the fibrous element, which, on competent authority, is essentially different in the two cases, but merely to the presence of certain microscopic elements; because, as I remarked before, fibrous tumour and cancer must by no means be confounded. 5. Hypertrophy of the uterine tissues when free from morbid growths, was a remarkable feature in the condition of the organ, and had occurred to an extent beyond anything I had formerly witnessed in cancer of the womb. Dr. Walshe, in speaking of this complication, says he has known the uninfiltreated portion of the uterus acquire three times its natural dimensions. It is in the soft, rather than in the scirrhus, cancer of the womb, that this hypertrophy prevails. 6. The condition of the cervix and os uteri deserves remark; the latter was absolutely lost by atrophy and distension, while the os was singularly dilated. I have notes of another case of somewhat similar alteration of the cervix, where the womb was the seat of an enormous fibrous tumour. At a future period I shall probably relate it. In both instances the cause was probably the same as that which determines similar changes in advanced pregnancy. 7. Although I purposely omitted it from the report as of accidental origin, I would here desire to allude to a phenomenon presented by the uterus

when removed from the pelvis,—namely, that as it lay upon the table, *percussion over the central part of the body elicited a distinct resonance*. There was no mistake about this, as the experiment was repeated, and Dr. Stewart heard it as well as myself. I mention it here partly because it gives me an opportunity of alluding to a similar resonance which I have observed over the right front of the chest in a man who had died with pneumonia of the right lung. In this case the resonance was noted as “almost tympanitic.” This, too, was confirmed by the testimony of a medical friend who assisted me in the examination, and was surprised at seeing a consolidated lung enclosed in a resonant chest. Both these occurrences must be attributed, not to any peculiar condition of the uterus or chest, but to some peculiarity in the mode or direction of the stroke, which the solid tissue conducted to the vibrating table on which they severally rested.

Physical Signs.—A few observations may not be out of place in relation to the physical evidence of the uterine disease as presented by external examination after death. In the first place there was not merely fulness, but a positive projection, obvious to the eye, at the lower part of the abdomen, which immediately attracted the attention on uncovering the latter. This was due to the tuberiform elevations resulting from the fibrous tumours in the substance of the womb. I cannot tell whether this sign existed during life, but at all events the tumours of the uterus must have been palpable to the hand. The fact that such can be felt, teaches this lesson, that we are not immediately to conclude on this account that they are *subperitoneal*. The determination of this point is of practical importance, since uterine hæmorrhage is far more rarely connected with them in this situation than when placed near the inner surface; still should the error occur, it would be on the right side, as it would lead to the further investigation. The general enlargement of the womb felt by the hand could only have been mistaken for that arising from pregnancy. A vaginal examination, however, during life, had the enlargement been detected at that time, would readily have distinguished between this and hypertrophy of the walls. In the former the cervix would not have been so completely obliterated at the period supposed to be arrived at, and the enlargement of the organ would have been felt more towards its anterior than towards its posterior walls. The partial mobility of the enlarged organs was indicative of what was observed after death,—namely, the absence of important adhesions, or of the extension of cancerous degeneration into the broad ligaments and neighbouring organs. In all this, however, there was no evidence of cancer of the womb. What, however, would have been ascertained, had vaginal examination been practised during life? A stretched, thinned, and, so far as its

natural form was concerned, an obliterated cervix; the os uteri most unusually opened and extended in its diameter, and occupied by a fungous growth, which would easily have been recognized as extending, at any rate, some way into the general cavity. This state of things only occurs, so far as I am aware, when the uterus has been distended by growth or deposit into its cavity, or by very unusual degeneration and tumour in its walls. The two cases might have been distinguished by ascertaining the size, duration, and contents of the uterine cavity, by means of the finger, speculum, or uterine sound. In the present instance I think there should have been no mistake in the diagnosis, had all the available means been adopted for ascertaining the physical condition of the diseased organ.

Symptoms.—In every chronic affection the symptoms of the disease are divisible into certain periods, which the practitioner should ever keep in mind. Before a chronic local disease can be said to have plainly manifested itself, there is mostly discernible a period of greater or less duration in which the patient is “ailing;” the general health is defective, and there is some degree of general debility and slightly disordered function, mostly exhibiting itself in the digestive and circulating system, and in the condition of the urine; these, from their very gradual accession, are commonly overlooked or attributed to occasional or incidental coincidence. It may be well if the acuteness of the physician prevents his being so readily led astray, and if he be impressed with the fact that so intimately is every function of the body connected with every other, that a disturbance in one, however trifling in amount, yet if prolonged in duration, ensures most certainly a derangement of the rest; it may be well, moreover, for the patient if the original source of his disorder be timely discovered, and be such as medical art can reach. The next stage is that of formation of the local disease. This may date its commencement from some accidental occurrence, some trifling local injury, or the latter may, by drawing attention to the seat of disease, merely unveil what had perhaps for months or years been slowly, insidiously, and painlessly, yet irremediably, not only disturbing function, but undermining structure. The symptoms of this period pass gradually, or perhaps after a prolonged latency, with the most fatal and uncontrollable rapidity, into those of the confirmed disease, in which for the most part the sensations of the patient direct the practitioner pretty surely to its seat, and in which far more frequently than at an earlier period of its development the assistance of his art is commonly sought. The last stage is that which immediately precedes dissolution; the symptoms of the local affection may be obvious and urgent, but they are very often marked by those which arise from excessive constitutional prostration, or from accidents—the result of the original disease, or

of the depression of the powers of life. The true physician's art is in this, and perhaps even in the preceding period, limited to the melancholy, but not the less important duty of soothing by his presence, his attention, and by the moral influence which he cannot fail to exercise, the mental disquietude of his patient, and, by gentle remedies and incessant watchfulness, of alleviating his bodily suffering, and rendering less troubled his journey to the grave.

In the present instance there is little record of the state of the patient's health previous to the development of the uterine disease, the only notice of ailment being, that she had probably suffered from the same abdominal flatulence and pain which used to trouble her more or less through the whole period of her illness. The first symptom of uterine disease was the occurrence of menorrhagia. Violent and repeated flooding, not to be accounted for by something in the state of the general or portal circulation, should always lead the practitioner to enquire into the structural condition of the uterus, and to institute a most careful investigation into the physical state of the organ. It is most likely that its first occurrence was determined not by the cancerous disease, for this was of more recent origin, but by the fibrous tumours in the uterine walls; and it is much more frequently when these approach the inner, nearer than the outer, surface of the organ, that they occasion hæmorrhage. I am not disposed to place any reliance on a "clotted" discharge as indicating uterine disease. Darting pain at the lower part of the belly, swelling of the legs, and vaginal discharge, would appear to have ushered in the more serious cancerous affection. The pain, however, was not of the all-absorbing character which is observable in the more ordinary forms of uterine cancer, being perhaps complained of less than any thing that the patient suffered, not even being such as to compel her to keep her bed; nor was it as in cancer originating in the cervix, described as darting through the pelvis. The character of the vaginal discharge when it first appeared could not be ascertained; but nine months before her death there passed from the vagina a substance described as similar to bone and flesh. A better similitude could not have been selected to represent the character of the fibrous tumours existing in the uterine wall, one of which had no doubt become enucleated in the progress of the disorganization. I would again impress on all who are called on to treat diseases of the womb, the importance of relying in no case on the statements of the patient herself as to the nature of the matters which pass from the vagina. They are as important as means of diagnosis, as the discharge from any mucous surface in the body, as much so as those of the lungs in pneumonia, or of the bowels in abdominal disease. The examination of this mass would of itself have afforded the most conclusive evidence, not only of

fibrous tumours existing in the uterine wall, but also of their situation with respect to the interior of the organ, while the calcareous degeneration it had undergone would have pointed it out as of no recent formation, and as the probable cause of the protracted menorrhagia. It was not until some months after this period that the vaginal discharge became offensive. It is not unlikely that the separation of the tumour gave room for the exuberant fungous growth which sprouted from the encephaloid mass into the cavity of the organ, just as in superficial cancer the removal of a restraint upon its surface is followed by a similar result. But I have not yet done with the instruction derivable from careful examination of vaginal discharges. We are informed that a few weeks before death a black substance passed from the vagina resembling the fungoid growth which filled the cavity of the womb—no doubt part of it. Had a portion been placed under the microscope, little doubt of its cancerous nature would have existed in the mind of the examiner. It is to be regretted that among practitioners in general this means of investigation is so little resorted to in the diagnosis of uterine disease. Applied to the urine, it has opened a field of the most valuable information, and advanced in an extraordinary degree our knowledge of renal disorders.

The discharge of this fungoid matter ushered in the latter symptoms of the complaint, which had reference, not to the uterus alone, but to adjoining organs. A difficulty in retaining her urine, which had annoyed the patient ever since the discharge of the fibrous mass, passed on into complete incontinence, partly due to paralysis, and partly the result of diminished capacity of the bladder from the bulk of the enlarged womb. She lost her appetite, and with it the remaining portion of her strength, and the sphincters of the anus ceased to perform their function. These are common occurrences during the last days of uterine disease.

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF PROFESSOR SANDS COX, F.R.S., SENIOR SURGEON TO THE HOSPITAL.

Reported by Mr. PETER HINCKES BIRD, late Resident
Medical Officer.

CASE XVI.

FRACTURE OF BOTH BONES OF THE LEG.

John Jelf, aged 21, was admitted into the Queen's Hospital April 13th, 1847, under the care of Professor Cox. He is a labourer; temperate and healthy. He states that about a quarter of an hour previous to his admission into the Hospital, whilst lifting a heavy

weight, he fell down with his right leg bent beneath him, and that all motion in the limb was immediately lost.

The leg was considerably shortened, and the foot was turned inwards. On examination it was found that the tibia was fractured in two places, the higher fracture being at the middle, and the lower at the upper part of its lower third; a small piece of bone was also found broken off from the lower portion. The fibula was broken near its middle. There was slight swelling.

The leg to be placed on Sharpe's external splint, and fomented with warm water.

14th. The swelling is considerable, accompanied with ecchymosis and some pain. Bowels confined. Extr. Colocynth Comp., gr. x., hora somni sumenda.

17th. Bowels open; the pain and swelling are nearly gone. The limb to be put in splints. A long, straight, concave splint was placed on the posterior part of the limb, extending from the middle of the thigh to near the heel, and very carefully padded at the popliteal space and above the heel, so as to adapt it exactly to the size and shape of the calf; this was then fixed by a few turns of bandage at the ankle and above the knee, considerable extension being kept up. Two lateral splints were then applied, and confined by tapes. The limb now looks very compact and straight, and the patient says he feels great comfort and support.

20th. Doing well; the comminuted portion of the tibia can be readily felt, but the bones are in good apposition.

May 12th. The splints were removed this morning; the fractured parts are united, and appear pretty firm. Splints re-applied.

May 29th. The bones are firmly united; a starch bandage was applied, and on the following day the patient was discharged with a perfectly straight and sound limb.

CASE XVII.

OBLIQUE FRACTURE OF THE TIBIA.

John Oxford, aged 58, boatman, admitted into the Queen's Hospital March 20th, 1847, under the care of Professor Cox. He states that about half an hour previously he was jammed between two carts; the wheel of one went over his foot, and having hold of the other cart, his left leg got twisted, and he immediately lost the use of it.

On admission there was an oblique fracture of the tibia at its lower third; a sharp point of the upper fragment was nearly through the skin. The lateral splint was tried, but it was found that it was impossible to keep the parts in apposition, and the straight principle was resorted to. The heel was well raised, in order that the upper sharp point of bone might be brought in a level with the lower; the point did project a little, and a small pad was found necessary to make it lie in perfect contact. He was discharged on the 14th of May.

CASE XVIII.

OBLIQUE FRACTURE OF THE TIBIA.

Arthur Howse, aged 45, carman, admitted into the Queen's Hospital, on May 1st, 1847, under the care of Professor Cox.

He states that about five months previously he slipped off a step, fell down, and twisted his left leg, which bent under him; he felt the bone break, and

immediately lost the use of the limb. On admittance the left leg was found distorted; the tibia was very obliquely fractured downwards and forwards at the lower part of the middle third; there was also a wound over the seat of the fracture, through which the sharp point of the upper portion of the bone nearly protruded.

This case was treated exactly as the last, and he left the hospital on the 10th of July, quite well, with a straight and sound limb.

CASE XIX.

OBLIQUE FRACTURE OF THE TIBIA.

John Kerkoff, aged 65, tailor, was admitted into the Queen's Hospital June 13th, 1847, under the care of Professor Cox. He states that about an hour ago he slipped down stairs and struck his leg, which was doubled up under him; he immediately lost the use of it, and experienced great pain.

On examination it was found that the right tibia was fractured very obliquely downwards and forwards, about an inch and a half above its inferior extremity. The leg was put up on the straight principle, as in the preceding cases, and the bone was firmly united on July 3rd.

1. *Remarks upon Fractures of the Leg in general.*—Fracture of the bones of the leg is a very frequent accident, which is accounted for both on account of their situation, exposing them to injury, and the weight of the body telling directly upon them, by reason of their position; for when a person falls, the leg may be variously placed, and so enable a force to act upon it, which will have no effect upon the femur.

The bones of the leg are scantily protected by muscles, the anterior and inner surfaces of the tibia being only covered by integument, and this circumstance may account in some degree for the simple fracture, but more especially for the compound fracture, being more frequent in the leg than in the thigh; and compound fractures of the leg would occur oftener than they do, but the force that causes them generally acts in a direction from the integument.

The reason why the tibia and fibula, unlike the bones of the forearm, are more frequently broken than either bone singly, is, that a force sufficient to fracture the tibia is for the most part generally sufficient to extend to the fibula afterwards, and break it.

The situation in which the bones of the leg are broken depends on the kind of force applied,—namely, the direct and the indirect. The head and the lower extremity of the tibia can never be under the influence of indirect violence, but must have a force directly applied, in order to fracture them, whilst the middle of the bone can be broken by both forces.

The above cases occurred from forces indirect; for example, take the case of Jelf. Falling with his leg obliquely under him, the lower end of the tibia was fixed by means of the foot upon the ground, and the upper end to the femur,—two points capable of resisting force, owing to the weight of the body, which then extended to the shaft of the bone and broke it, without the aid of any direct violence.

In Oxford's case some direct violence might have been added, but I think the twist was the main, if not the only cause of fracture, there being no bruising of the part.

In the case of an old woman who was admitted

with fracture of the head of the tibia, it was caused by direct violence.

2. *A few Observations on Fractures of both Bones of the Leg.*—The bones of the leg are sometimes broken opposite each other, but more frequently the tibia is broken at one point and the fibula at another: and this depends upon the kind of force that produces the fracture, for when a direct force acts, the former takes place, and from an indirect one, the latter. This is easily understood, for when we consider the difference in size and shape of the two bones, it cannot be inferred that both can offer the same resistance, and the consequence is, that when an indirect force acts, it first fractures the tibia, perhaps, at its centre; it now comes to the fibula, and in consequence of the tibia being broken, the force acts in a different line,—namely, more obliquely than it did on the tibia, so that the difference in *shape and strength of the bone, and its changed point of resistance together*, cause the fibula to break at a remote point from that at which the tibia yields.

In most cases I have found the fibula broken at a higher point than the tibia, when the accident had occurred from an indirect force, and the tibia is very commonly broken near its centre, and the fibula an inch or two higher up.

The fracture is generally oblique through the tibia, the cause of which depends upon its shape, which makes the bone to resist differently in various parts, and so alter the line of direction of the force. The direction of the fracture is generally downwards, inwards and forwards liable to modifications. The tibia may sometimes be comminuted, but this generally results from direct violence, and the brittleness of the shaft is favourable to its production. The fibula is generally broken transversely, but sometimes obliquely.

Fractures of both bones of the leg are easily detected, but not so when only one bone is fractured, the symptoms being far less prominent, for the displacement and retraction which takes place in the former cases, may be entirely absent in the latter.

The muscles of the leg offer greater resistance in reduction of the bones, than in any other kind of fracture, by reason of so many powerful muscles passing from one part of the leg to another, and acting upon two portions of bone, thereby favouring retraction, and creating great difficulty in keeping the fractured ends in apposition.

3. *Remarks upon the Treatment and Description of the various Modes adopted in Fracture of both Bones of the Leg, and why the Straight Principle was preferred in the above Cases.*—Fractures of the leg are, perhaps, more difficult to treat than any other kind of fracture, for the muscles that cause the displacement of the bones are powerful, and are so situated, that they frequently draw the ends of the bone out of apposition, and require great force to overcome them. The first thing to be done is to place the limb in the most favourable form to relax the muscles, and to do this we must consider the position of those muscles that are most disposed to contract, and ascertain the precise point from which they act.

The gastrocnemius and soleus are the chief muscles in causing displacement of the fractured portions, the deeper muscles having very little influence on account of their peculiar mode of origin, and the direction of their fibres, which do not allow them to shorten much.

The position most favourable for the relaxation of the muscles is obtained by placing the knee in a state of flexion, so as to make the tibia form a right angle with the femur, and the foot a right angle with the leg. This is done either by placing the patient on his side, or on his back, and in the latter case, using the double-incline plane.

Since the days of Pott, fractures of the leg may be said to be treated by position only; he made position his grand object, always taking care to place the limb, so that all the muscles might be relaxed as much as possible, by which little or no mechanical force is wanted afterwards to keep the fractured portions of bone in apposition. The limb is placed on its outer side, and the hip and knee-joints flexed, by which the most powerful muscles are relaxed, and tendency to spasm prevented. One straight splint is placed on the outer side of the leg, extending from above the knee to below the ankle, and another splint of the same length is placed on the inner side, care being taken to pad each properly. This is undoubtedly a good method of treatment, and the simplicity of its application, and its requiring no apparatus but what can, under any circumstances, be always obtained, are certainly great recommendations; but I shall presently point out some objections to this principle of treatment, and the great advantages of the straight one. The objections to the former are, the tediousness and inconvenience of keeping the patient confined a long time on his side. I have heard many patients complain, especially those of short stature, of great inconvenience from this position, and the consequence is, they endeavour to turn on their backs, which cannot be done without moving the leg from its proper position, the level of the knee is altered, and therefore it does not lie in proper relation with the foot, for the latter will remain flat on its outer side, while the upper portion of the bone is taken with the knee. It is often advisable, however, to adopt this treatment at first, and alter it afterwards; for the limb may be so much bruised or swollen, or the spasm may be so great in the muscles, that it is often quite impossible, and would be even cruel, to use any means that confine the limb, or place it in any position that puts the muscles on the stretch. When the swelling has subsided, and the soft parts recovered themselves, the straight position may be chosen with advantage.

The splints that are best adapted for treating fractures of the leg in this manner, are those of Mr. Sharp, which consist of two portions of wood or iron hollowed out, and made of the width of the leg, taking also the shape of the limb. Each splint is hollowed out for the malleolus, and they may be kept in position by three or four straps, or by passing strips of bandages round them.

Another objection to this principle of treatment, besides that alluded to, of confining the patient so long on his side, is, that when there is any disposition for the one portion to ride upon the other, it has no mechanical advantage over the ends of the bone, all it can do is, to steady the two ends of bone generally, and keep the joints that are connected with them at rest.

I shall now mention the modes of treatment which require the limb to be placed on its posterior surface; they answer admirably, and are without the inconvenience of laying the patient on his side.

The apparatus (the most simple in its application,

and generally the most beneficial in its results,) is that known by the name of the "junks." It consists of two rollers of wood or straw, long enough to extend below the ankle and above the knee. They are included in a piece of linen, by being rolled within it, the leg resting on its central portion; each roller is then rolled until it comes in contact with the leg, one being on the outside, and the other on the inside of the limb; they are fixed by a few turns of bandage at the ankle, and just below the knee, and the posterior part of the leg is left lying upon a well-padded pillow.

This method, with an additional splint, has been followed at the Queen's Hospital during the last year with very satisfactory results. Instead of rollers of straw or wood, two of Sharp's splints are used, one being placed on each side of the leg, and the additional one—a long concave splint, is placed on the posterior part of the limb, reaching from the middle of the thigh to near the heel.

The following is the method of applying this apparatus:—The surgeon takes charge of the limb, and whatever reduction of the fracture may be necessary, is first to be made. The leg is then raised from the bed by grasping the knee with one hand, and the instep with the other; when raised to a sufficient height, an assistant places the long concave splint, well padded, beneath the limb, and it is then fixed by a turn of bandage above the knee, and by another at the ankle; Sharp's external splint, with a foot-piece, is now to be placed on the outer side of the leg, and there fixed by a bandage, after which an internal splint is placed on the inner side, and fastened by tapes. The advantages of this method of treatment are the following:—It fixes the leg firmly, for, if properly applied, the pressure will tell all along the limb. Any degree of pressure may be made by tightening the tapes.

The limb can always be examined without disturbing the parts, for when the side splints are removed, the *foundation* one remains.

The anterior part of the leg is always exposed and open for inspection. The finger can be passed down the anterior part of the tibia, and any irregularity can easily be detected; lotions can be easily applied, and if displacement be dependant on position only, and not upon spasm, the heel can be raised or depressed, according to circumstances, by appropriate padding.

This has also a great advantage over the common "junks," as it remedies the only possible evil to which they are liable, namely, the sinking of one or other portion of the bone posteriorly, owing to the pillow on which the leg rests yielding; now, this is all guarded against, for if the posterior splint be firmly padded, it cannot give way.

The principle on which this apparatus acts is merely to steady the limb generally, and from its position the portions of bone are kept in a right line. The apposition of the ends of the bone is not at all interfered with by the limb being placed on the posterior surface, and gives the patient the additional advantage of lying on his back, which is so much more comfortable, when the same position has to be continued for some time.

The above cases, which were all awkward fractures, speak favourably of this method of treatment, and I have come to the conclusion that it is the best method of treating fractures of both bones of the leg. The whole apparatus when applied looks very compact and

neat, and the patients express themselves as feeling great comfort and support from it. It is also particularly applicable when the patient is restless; it completely guards against any accident. The posterior splint fixes the limb so firmly, that when well bandaged, the patient may throw his leg in almost any direction without the fear of displacing the portions of bone. There is another apparatus which may be employed with great advantage in some cases, where the fracture is very oblique, it is a modification of M'Intyre's splint by Mr. Liston. This has no advantage over the previous method of treatment, except that from the lower part of the leg-piece being absent behind, the heel can be very easily raised or depressed at any level.

Although I have recommended the straight principle very strongly, I do not mean to say that it will succeed in all kinds of fractures, and the surgeon must be guided by the circumstances of the case, and adopt that apparatus which will best fulfil the indication pointed out by the state of the limb, and the kind of fracture.

PROVINCIAL *Medical & Surgical Journal.*

WEDNESDAY, MAY 2, 1849.

It is sincerely to be regretted that a want of integrity should so frequently be observed in connection with the purchase and transfer of medical practices. There can be no valid objection to professional negotiations for mutual benefit, so long as the conduct of the parties is regulated by honourable principles, but we fear that the fair and legitimate intention of the vendee is, in many cases, frustrated by the wilful misrepresentations of the vendor. The temptations to deviate from the path of honesty are, in some instances, very strong, and the facilities for fraud are so great as to render the utmost wariness necessary for the prevention of imposture. The members of the medical profession are, unfortunately, often placed in circumstances of pecuniary difficulty, and are urged by privation and distress to employ disreputable means for the temporary supply of that maintenance which the exercise of their calling has failed to yield. Under the depressing influence of poverty the spirit loses some portion of that moral sensitiveness by which it was guided in former days,—when the sky of life was comparatively free from clouds, and recourse is had to a system of trickery by which a brief advantage may be gained.

The plan whereby this end is oftentimes accomplished, is the following:—Books are

prepared containing a long catalogue of patients, who either have no real existence, or, if they have, are not in a condition to pay the fees that are fictitiously entered to their account. These books are produced to a young stranger, who is anxious at once to enter into practice. He reads over the list, is captivated by the address and apparent ingenuousness of the deceiver,—feels a glow of excited hope as he calculates the aggregate of figures,—hastily closes with his new acquaintance,—pays the money that is demanded,—and subsequently discovers, by gradual but unquestionable evidence, that he has been *completely duped*. He perceives when it is too late, the folly of his precipitate decision, and vainly reflects that careful enquiry from disinterested parties, rigid scrutiny of character, and the aid of judgments more matured than his, would have prevented both his disappointment and his loss.

Human nature is too subtle to be readily apprehended,—too complex in its machinery to be easily understood. They who fancy themselves secure, because the surface of the lake looks smooth, will ere long find that the sharpest rocks may lie concealed beneath the most tranquil waters.

We would earnestly caution our brethren, and especially our *younger* brethren, never to be beguiled into *hasty* arrangements for the purchase of a practice, and not under any circumstances to place implicit reliance upon unsupported statements made by *interested* persons. If you hear of a favourable partnership or introduction, go and ascertain by actual observation how far the facts correspond with the description, and wait for the result of that testimony before you finally decide. Do not be hurried by the assurance which is frequently given, that other people are in treaty, and that unless you immediately acquiesce your chance will be entirely gone. Such urgency may occasionally be well founded, but in the great majority of cases you are justified in *suspecting* the truthfulness of those who seek to compel you to take an important step without allowing time for due consideration.

On the other hand, disappointments may arise from too much self confidence on the part of the vendee. He finds a *bona fide* practice established and maintained for many years, and he imagines that the payment of a certain sum of money is all that is required to place him in the favourable position of the original possessor. A little careful thought will shew the fallacy of

these sanguine anticipations. It is almost impossible that the entire interest of a medical practice can be speedily conveyed to a second person, particularly if he be younger and less experienced than his predecessor; and it generally happens, that he who buys is younger and less experienced than he who sells. It is also generally true that, where there are several medical men of long standing in the same town, the confidence of many patients is so *prospectively* engaged, that when their regular attendant has retired they will consult one of the former residents rather than a new-comer, with whose character they may be unacquainted. A great amount of vexation and loss might be prevented if those who intend to purchase practices would first learn, by *personal attendance*, what proportion of patients may fairly be regarded as secured. We think that an *honest* man would willingly allow every facility in his power to enable either a partner or successor accurately to estimate the nature of the circumstances; and we should always feel distrustful when we detected a tendency to introduce, rather than to remove, obstacles that might prevent the opportunity of thorough investigation.

Our remarks are not speculative but strictly practical, and are founded upon the bitter experience of many a young but too confiding expectant of professional success. There are unprincipled men in every department of science, and our own department is far from being exempt. The imperfections of our nature are variously exhibited, and multiplied are the instances in which genuine and high-toned principle is manifestly absent, although circumstances may not lead to the development of the whole extent of evil to which the inherent depravity is adequate. We should all strive to counteract the *primary* indications of every thing that is sordid and ungenerous, and to cultivate, with constant assiduity, those exalted sentiments which confer honour and dignity on man; and, in proportion as the *individual* members of our profession shall regulate their conduct to each other and to the world, by high and noble feelings, in that proportion will our *aggregate fraternity* be entitled to admiration and respect. We must not look to Parliamentary enactments,—to National Institutes,—to nominal distinctions, as the foundation of our stability and welfare, but to the firm basis of personal benevolence and integrity, upon which alone can be established a permanent superstructure of courtesy and truth.

Proceedings of Societies.

BATH AND BRISTOL BRANCH OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

A Quarterly Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association was held at the Medical Library, Orchard Street, Bristol, March 22nd, 1849, Farnham Flower, Esq., President, in the chair.

There were present—Drs. Lindoe and Davies, Messrs. Norman, J. Soden, Waldron, J. King, Brace, Bartrum, of Bath; Parsons, of Beckington; Cockey, of Froome; Crang, of Timsbury; Drs. Symonds, Green, Trotman, Kay, and Budd, Messrs. Neild, Lancaster, Ogilvie, Mayor, Surrage, Prichard, Godfrey, Estlin, Swayne, Jos. Swayne, Clarke, and Colthurst, of Bristol. Visitors: Dr. Boyd, Messrs. Harrison, W. Smith, and Gillow.

The minutes of the last meeting were read and passed. Dr. Symonds read an elegant and elaborate eulogy on the late Dr. Prichard, one of our venerated presidents, upholding the propriety of doing so, not only by reference to the custom of the ancients, but also by the kindly effect it produced on our better feelings. A few anecdotes of Dr. Prichard's early life shewed him to be of a literary and studious caste. He pursued his medical studies at Edinburgh, where he graduated in 1808, choosing for the subject of his thesis "The History of the Various Races of Man." This, it is demonstrated, formed the foundation of his work on æthnology, the first rudiments of which he published in 1813, and which Dr. S. characterized as the great work of his life—the work by which he would go down to posterity, whilst he pointed out the various modifications and gradations through which it passed, until it arrived at maturity in 1846. Dr. S. also enumerated various literary and scientific works which he published on collateral subjects, especially noticing the one on "Ægyptian Mythology," in 1819.

Although thus occupied, Dr. Prichard was not inattentive to his professional studies, as evinced in that splendid and truly practical work "On Nervous Diseases;" and in a paper published in the *Medical Gazette*, Jan., 1831, on "Incisions along the Sagittal Suture in Diseases of the Brain." A paper on the same subject being read by him before the British Association at their meeting in Bristol, in which the incision was shown to be more beneficial in chronic than in acute diseases. Dr. Symonds noted his appointment as Physician to St. Peter's Hospital, in 1816, to the Bristol Infirmary, and the great interest he took and the share he had in forming the Bristol Philosophical Institution, and laid great emphasis on the universal esteem in which he was held by his medical brethren for his urbanity and integrity; the general regret at his retirement from Bristol being in some degree counterbalanced by the advantages he obtained from his appointment as one of the Metropolitan Commissioners in Lunacy.

Dr. Symonds enumerated his various honors, specially describing in very forcible language, the meeting in the library at Oxford, when the honorary title of M.D. was conferred on him by that University.

Dr. S. then concluded his address by an able analysis of Dr. Prichard's mental powers.

Messrs. Norman and Colthurst hoped that Dr. Symonds would kindly publish the paper then read.

Mr. King trusted that it would be in the volume of *Transactions*, and not in the *Journal*.

Dr. Symonds stated that he proposed publishing it, but had not as yet determined on the form of doing so.

Mr. Parsons, of Beckington, read a paper "On Infantile Diabetes in a Child weaned at two months, and accustomed to be quieted by the use of a sugar teat, in which way he consumed from three quarters to a pound of sugar daily." Dr. Kay considered the case interesting as a specimen of diabetes artificially induced in the human subject; and Dr. Budd referred to the experiment of Dr. Percy, of Birmingham, who fed a dog on sugar until diabetes was produced.

Mr. Bartrum and Dr. Davies mentioned some remarks published in the *Archives Générales*, on animals fed entirely on meat and yet secreting sugar in the urine.

Mr. Bartrum, of Bath, read a paper "On Pelvic Abscess, arising from Inflammation of the Peritoneum." He referred to two cases occurring whilst he was clinical clerk to Dr. Watson, at the Middlesex Hospital, as first exciting his attention. He then gave the details of several private cases of phlegmonous abscess in cellular membrane of the pelvis, and also noticed inflammation of the ovaries as sometimes the exciting cause.

Mr. Norman spoke of the frequency of abscess in the pelvis in the female, relieved variously by discharges from the vagina, rectum, &c., gradually or suddenly as may be; also abscesses by the side of the rectum in the male assuming the appearance of ordinary fistulæ.

Mr. Lancaster introduced a case of lumbar abscess, consequent upon parturition.

BIRMINGHAM PATHOLOGICAL SOCIETY.

January 4th, 1849.

FREDERICK RYLAND, Esq., in the Chair.

SUICIDAL WOUND OF THE LARYNX AND PHARYNX.

Mr. Pemberton gave the following history of this case:—

A. C—, aged 36, of the Jewish persuasion, was brought to the hospital at nine a.m., December 21, 1848, under Mr. Wood, having cut his throat with a razor an hour and a half previously. He was pale and cold; there was urgent dyspnoea; and he had a restless wandering appearance. The wound was five inches and a half long; the right extremity was distant an inch and three quarters, the left two inches and a half from the lobe of the corresponding ear; its direction corresponded to the direction of the thyro-hyoid space, dividing the structures intervening between the surface and the pharynx, which latter cavity was opened for two-thirds of its circumference. At every inspiratory effort the larynx uttered a loud stridulous noise, and at times its action was evidently spasmodic. There was a good deal of venous oozing, but no arterial jets; the carotids could be distinctly felt pulsating; above, the os hyoides could be well marked by the finger, deprived of all structures below by the effect of the incision. An attempt was made to pass an œsophagus tube into the stomach, but the most alarming symptoms of asphyxia were thereby induced.

Breathing became gradually more and more oppressed, and the patient died at twelve, four hours after the infliction of the wound.

Sectio cadaveris twenty-four hours p.m.—Frame compact and muscular; large adipose development; stature small; marked Jewish configuration. Upon external inspection the penis appeared bruised; the anterior surface of the scrotum appeared slightly ecchymosed. The wound had divided the epiglottis in half, the one portion attached by its membranous folds to the os hyoides remained at the back of the tongue, whilst the base lay close upon the rima glottidis, closing it with the exception of a slight interval between the cut surface and the laryngeal aspect of the arytenoid cartilages. The thyroid arteries and the external jugulars must have furnished the hæmorrhage, the main vessels being uninjured. The trachea, bronchi, and their subdivisions in the lungs, were plentifully filled with frothy blood; no blood had passed into the œsophagus, but the stomach contained a large mass of undigested food. The left lung was adherent by some slight pleuritic bands, otherwise it was healthy; no spots of pulmonary apoplexy were discovered. The cavities of the heart were generally distended with dark fluid blood, as were also the aorta and the great branches from the arch; this condition of fulness of the vessels was more especially marked on the right side of the organ. Head not examined. The remaining viscera did not present an exsanguined appearance.

Mr. Pemberton ascribed death in this case principally to a state of asphyxia, induced in part by the presence of so much blood in the trachea and bronchi, and partly by the base of the epiglottis falling like a valve upon the glottis, so as partially to close it, being deprived of the support afforded by its attachment to the tongue by its separation from the main body of the cartilage; but as there was no blueness of the face and lips, he thought it probable that the hæmorrhage and shock, together with the state of mental depression which his history disclosed, also took their share in hastening the fatal termination.

The history of his case, as revealed at the Coroner's inquest, was as follows:—He was married on the day previous to that of his death to a young woman of his own religion. They retired at about half-past eleven at night. He appears, during the night, to have thrice vainly attempted to consummate his marriage. During the whole night, as indeed during the previous day, he manifested a marked restlessness and anxiety, getting up from the bed, and walking about many times in the night. The last effort he seems to have made at the completion of his object preceded the act of suicide by about half an hour. At half-past seven his wife missed him from her side, was attracted by groans in an adjoining apartment, procured assistance, and found her husband lying on his face, a razor under his head.

CASE OF SUDDEN DEATH: ULCERATION OF THE STOMACH: GALL-STONES.

Narrated by Dr. Russell as follows:—

"The preparation was given me by my friend, Mr. Simons, who treated the case after the patient had passed from under my care."

J. K., aged 69, came under my care as a patient of the General Dispensary, May 22. He was suffering from pain across the epigastrium, occasionally aggravated by paroxysms of great severity. During the period of his attendance he once reported to me that he had vomited a considerable quantity of blood. I examined him carefully, but could not detect anything to explain the pain. He continued under me for about twelve weeks, without much improvement; from the paroxysmal nature of the attacks of severe pain, and from his description of the nature of the pain, I was led to ascribe it to the presence of gall stones; but his cachectic appearance, and his emaciated condition often suggested to me the suspicion of some malignant disease. My treatment was chiefly of a tonic character, with opiates to relieve the pain. He was greatly reduced in circumstances by his illness. Subsequently he was attended by Mr. Simons, who thus reports the conclusion of the case:—

He came under my care in October, with symptoms of pericarditis; he also complained of occasional violent pains in the region of the liver; he had been under medical treatment for the last two years. When the violent pains in the side came on he found most relief from lying down over two chairs. He continued in the same state until Monday, December 19th, when upon returning from the relief station he complained of feeling faint, sat down in the chair and expired. About four months back he vomited about half-a-pint of blood, and twice since in smaller quantities.

Post-mortem.—Heart large, soft and flabby, with about two ounces of liquid blood in its cavities; lungs emphysematous; liver very large, but healthy in appearance; about eight or nine gall stones in the gall bladder, and one impacted in the duct; the stomach contained about half-a-pint of gruel; the coats thickened, and at the upper and back part, at the smaller curvature, about mid-way between the openings, there was an old ulcer through the coats. There was no effusion into the cavity of the abdomen, and I am of opinion that the perforation was completed in taking out the stomach.

The ulcer now presented to the Society will be seen to be of considerable size, oval, its largest diameter about that of a shilling. The mucous membrane is very much puckered, forming long wrinkles radiating from the circumference of the ulcer; externally the appearance of the perforation favours Mr. Simons' opinion, that a cellular layer which probably closed the ulcer, was ruptured in the course of the *post-mortem*, but it is evident that a fatal rupture could not have been long deferred had the patient lived. The mucous membrane having been dissected off, the muscular coat is seen greatly hypertrophied, forming for some distance around the ulcer a layer of considerable thickness, in which the course of the muscular fibres is very distinct, presenting a close resemblance to voluntary muscular fibres. The organic fibres were very distinct under the microscope. This coat gradually diminished in thickness at a distance from the ulcer. In the same part of the stomach the submucous cellular tissue was hypertrophied to a corresponding degree, forming a dense, white, fibrous layer, like a fascia. Fat had been deposited to some extent around the ulcerated portion, in the external cellular tissue.

Dr. Russell remarked on the attacks of hæmorrhage from the stomach on three occasions. The situation of the ulcer was at the smaller curvature, near the coronary vessels, and it is probable that one of their branches furnished the blood. In this respect this case of ulcer of the stomach differed from others which had been before the Society in the course of last year, and also in the patient being an elderly man. The other cases referred to were in females, mostly young, and more or less chlorotic, and the greater tendency of these ulcerations to occur in such subjects was made the subject of remark. It is curious, moreover, that in all our four cases last year, the situation of the ulcer was in the anterior wall of the stomach, in this respect also differing from the case now presented.

Presented November 2nd, 1848.

CANCER OF THE PYLORUS.

Mr. Wickenden presented a very fine specimen of gelatinous cancer of the pylorus:—

Mrs. —, aged 44 years, of delicate health from childhood. Catamenia occurred first about the usual time, and except during her pregnancies, and whilst suckling, occurred with regularity. Suffered for more than ten years from indigestion; has had several children; two are alive; they are delicate, but not unhealthy. The last two or three years (since she has ceased to bear children, and the last was born four years ago,) she has had much water-brash, and vomiting of food. For a long time the vomiting has been effected without difficulty or disgust; the appetite has been good, and many meals have been taken most days. The food has been voluntarily ejected in a few minutes afterwards, in consequence of the pain it caused; she was, however, impatient of restraint in diet, and when for a time she was induced to live upon milk, with lime water and whey, with rüsk, she could not say that she felt more comfortable. The capacity of her stomach seemed prodigious from the fact of her sometimes vomiting two washhand basons full of half-digested food at a time, during the last year of life she occasionally vomited blood, and the matter thrown up, however abundant, usually was of dark colour. No tumour could be distinguished in the abdomen during life, nor pain on pressure at the pit of the stomach. She became extremely emaciated and died anasarcos in October, 1848. The patient always ascribed her stomach affection to a long confinement to bed in consequence of compound fracture of the leg and ankle-joint caused by the overthrow of her carriage.

Autopsy.—External appearance of the body:—Extreme thinness; anasarca; a tumour distinctly to be felt, and its site perceived through its abdominal parietes; every trace of fat gone. *Thorax:* Lungs and heart healthy. *Abdomen:* Stomach very large and contained about a pint of food, the stomach did not lie across the abdomen, but occupied entirely the left hypochondrium, so that the long axis of the stomach was as nearly as possible in a line with the œsophagus; the coats of the stomach were much thickened and the pyloric orifice so nearly closed as to admit with difficulty a small crow-quill, this extremity of the stomach was occupied by a soft tumour of the magnitude of a large walnut, and near to it might be seen considerable thickening of mucous membrane,

elevated into masses similar in structure to the tumour; from the whole of them could be seen blood exuding; the small and large intestines were healthy, as well as every other organ in the abdomen. *Pelvis:* The whole curve of the uterus was preternaturally hard, and the mucous membrane of the os uteri was very red in consequence of the numerous and highly injected state of its blood vessels.

Foreign Department.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DE MEDECINE, PARIS.

DISCUSSION ON CHLOROFORM.

The present sitting has witnessed the termination of the discussion on chloroform, and its results may be summed up in the following general conclusions:—

1. Chloroform is a powerful poisonous agent, which ought not to be used except by experienced persons.
2. It is, both by its odour and action, an irritant of the bronchial membrane, and therefore requires to be used with great caution when there is any affection of the heart or lungs.
3. Chloroform possesses a peculiar poisonous effect, which if prolonged beyond a certain period is capable of destroying life.
4. More danger accrues from certain modes of exhibiting this agent than from the agent itself.
5. This danger may be avoided by the following precautions:—1, to use pure chloroform, and in moderate doses; 2, to explore the condition of the thoracic organs previously to its exhibition; 3, to take care that a sufficient quantity of atmospheric air is respired with the chloroform; 4, to suspend the inhalation as soon as the patient becomes motionless; 6, not to exhibit it until digestion is completed.

FUNGUS OF THE SPINAL DURA MATER.

M. Bouvier communicated a case of *fungus of the spinal dura mater*. The patient was a female aged 64, who entered the hospital for incomplete paraplegia, which had come on gradually, and without obvious cause. Sensation and motion were partially abolished in both limbs, but more particularly so on the left side. She had command over the bladder and rectum at first, but subsequently the bladder was paralysed, and the urine required to be drawn off daily. The paralysis rapidly increased, and both legs were the seat of severe cramps. The patient died at the end of two months.

On opening the spinal canal the *dura mater* about the tenth dorsal vertebra was elevated by a small tumour, the size of a nut, situate on the posterior aspect of the medulla, and to its left side; its consistence was moderate, of a whitish colour, and in all respects similar to encephaloid cancer. The spinal marrow was sensibly compressed, and pushed on one side. The other organs of the body were sound.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DES SCIENCES, PARIS.

CAUTERIZATION IN POISONED WOUNDS.

M. Parchappe communicated a note on the effects of cauterization in virulent inoculation, in answer to the remarks of M. Renault, on the uselessness of this treatment in canine rabies. M. Parchappe failed to establish its prophylactic powers in the case of animal poisons, as all his experiments were with strychnine, a poison of a totally different nature.

M. Hervier presented a memoir on the exhalation of carbonic acid in health and disease. (See a former number, p. 191, in which the conclusions are given among the articles in the "General Retrospect.")

IODIDE OF POTASSIUM AS A REMEDY FOR THE POISONOUS EFFECTS OF LEAD AND MERCURY.

A paper by M. Natalis Guillot, on the use of iodide of potassium as a remedy for the poisonous effects of mercury and lead, was also read. The most interesting portion of the communication is that in which the author shews that the injurious effects of lead may be rapidly removed by small doses of the iodide, while a large dose appears to increase its poisonous properties. The experiments were made on dogs. Their explanation of the *modus operandi* of the iodide is, that it forms a soluble salt with the mercury and lead, which are thus readily eliminated.

An interesting notice was also given of the existence of the practice of anæsthesia for operative purposes, as well as of hydropathy, among the Chinese, as early as the sixteenth century.

USE OF THE PANCREATIC FLUID.

M. Bernard presented his important memoir on the uses of the pancreatic fluid. [This has been already published entire in a former number of this Journal.]

Some other communications of trifling interest were also presented.

THE PETITION OF MEDICAL OFFICERS OF UNIONS IN ENGLAND AND WALES.

The humble Petition of the Chairman and Committee of the Medical Officers of Unions in England and Wales, and other Members of the Medical Profession,

Sheweth,

That your Petitioners have been duly authorised, by resolution passed at a meeting of delegates and others representing the medical officers of unions in England and Wales, held at the Hanover Square Rooms, on the 19th of February, 1849, to lay before your Honourable House a statement of the grievances complained of by the said medical officers, and to solicit the interposition of your Honourable House for their redress and removal.

That your Petitioners have already, by memorial to the Right Honourable the Secretary of State for the Home Department, and to the President of the Poor-

Law Board, respectfully set forth the numerous evils and defects of the present system of administering medical relief to the sick poor, more especially as they affect the position and interest of the medical officer; but your Petitioners lament that hitherto no decisive steps have been taken towards their amendment, either by the Government or the Legislature; they therefore entreat the attention of your Honourable House to the manifold injuries which they sustain under the existing laws.

Your Petitioners desire to impress upon your Honourable House their conviction that very much of the difficulty and dissatisfaction attending the operation of the poor laws originates in the present mode of affording medical aid, for it will appear, on examination of the facts, that almost every case of complaint that has strongly agitated public opinion has been contingent on the imperfect arrangements in this important branch of poor-law administration. Among the defects of this system bearing more directly on the well-being of the destitute poor, the following are the most obvious and important:—

1st. The difficulty of obtaining an order for medical relief from the relieving officer in cases of sudden illness, of accident, or of midwifery.

2nd. The frequent refusal and general uncertainties of remuneration to the medical officer for his attendance on a poor patient under such circumstances, and the consequent hardship either to the patient, the medical officer, or both.

3rd. The undue restriction on the medical officer in reference to his power of ordering the necessary aliment for the cure of his patient, and the frequent neglect of such orders when given.

4th. The want of the requisite inspection over the working of the system by intelligent and duly qualified medical men.

That there can be no doubt that in consequence of the present complicated and inefficient system much avoidable suffering and distress afflict the labouring classes; and that, by invaliding the father of a family, and throwing him, his wife, and children upon the funds of the Union for support during a protracted disease, and by the increased expenditure arising from premature widowhood and orphanage, the burdens on the ratepayers are greatly augmented; whilst, also, the same causes tend to increase that rapidly-spreading mass of hereditary pauperism which is confessed to be a national calamity, which has brought the Poor-laws themselves into very general disrepute and distrust.

That, whilst your Petitioners deplore these evils, they feel it their duty to state that the medical officers are worked heavily and at great disadvantages, and, although, as it has been generally avowed, they perform their trying and onerous duties with zeal and humanity, they have nevertheless universally complained of the grievous pressure of the system under which they act, and of the want of encouragement to exertions, hitherto so faithfully rendered, which they experience in the disgracefully low and parsimonious remuneration at present awarded.

That your Petitioners have ascertained, after an examination of returns from 805 districts in various

parts of the country, that the average payment per case for medical attendance on the poor is only 2s. 7d. for the country district, and 1s. 6³/₄d. for the metropolitan districts, the highest of which sums is scarcely sufficient to defray the reasonable cost of drugs at the rate of expenditure that obtains in hospital and dispensary practice, and affords not the slightest recompense for the surgeon's skill, time and labour, which in an extensive and populous district are so fully engaged, that he is greatly impeded in his efforts as a private practitioner, and he sustains in this respect a heavy loss, of which he becomes sensible only when it is too late to redeem it. That it is also proved that, in consequence of the salaries being fixed upon no definite plan, the payment for medical service varies very widely in different districts, being so high in the Bishop Wilton district of the Pocklington Union as 14s. 4d. per case, and so low in a district of the Newton Abbott Union as 3d. per case; that also, the remuneration is frequently in an inverse ratio to the amount of work done, and instances are known to your Petitioners where one medical officer doing ten times more work than another receives only one-fourth of the remuneration per case. Similar inequalities prevail even in different districts of the same Union, in consequence whereof great injury has been done to many hard-worked and meritorious officers, and the liveliest dissatisfaction has been expressed throughout the country. Your Petitioners would also beg the attention of your Honourable House to the fact, viz., that the civil surgeon attending a detachment of the army receives 6s. 6d. per head, sick or well,—a sum that would afford remuneration of several pounds for each sick case; also that 13s. 7d. is paid for a sick felon who is attended in a jail, whereby the time of the surgeon is not wasted, nor is strength impaired, by making extensive and laborious journeys; and that 7s. per head is paid for the police. And your Petitioners trust that the contrast of these payments with the paltry average of about 2s. awarded for medical attendance on the sick poor of this country will present a striking illustration of the wrong and hardship to which the union medical officer is subjected, and will convince your Honourable House of the instant necessity of reforming so unjust and degrading a system.

Your Petitioners further desire to state, that the invidious position in which union surgeons are placed between the rival powers of the honourable the Poor-Law-Board and the Boards of Guardians, operates most disadvantageously to their interests and to the satisfactory performance of their official duties; for, inasmuch as any complaint or misunderstanding that may arise, or any appeal that may be made, involves the liability of coming under the jurisdiction of two conflicting boards, the expectation which the medical officer ought to feel of a just reward from a calm and unbiassed consideration of his case is annihilated by the conditions under which the adjudication is made.

That, moreover, in consequence of this antagonism between the central and local boards, the union surgeons are unjustly deprived of the benefit of those instructions issued in their favour by the Poor-Law Board in accordance with the recommendation of a

Committee of your Honourable House; and your Petitioners beg to adduce the following illustrative facts confirmatory of this statement. That, in the year 1842, the honourable the Poor-Law Commissioners issued a code of regulations to the Boards of Guardians, ordering a scale of payments therein specified to be made to Poor-Law medical officers as extra payments for various surgical operations, and expressly commanded that such extra payments should not be included in the salary of any district medical officer, or contract made by any Board of Guardians, with a district medical officer; yet, despite this express injunction of the Honourable Commissioners, your Petitioners are authorised to state that these instructions have been very generally evaded or disobeyed by the Boards of Guardians; that several of them reduced the salaries of their medical officers, in order that, after the addition of the extra payments, the salaries might not exceed the original amount; others, by undue constraint, induced the medical officer to compound for all extras by a small fixed addition to the annual salary; whilst others have systematically and rigorously evaded the order, by sending all cases of accident to some hospital to which the Board subscribes, and thus the medical officer is deprived of any boon intended by the instructions of the Commissioners, the patient's sufferings are considerably augmented, and even his life often risked by the removal in carts over bad roads for many miles, during perhaps an inclement period of the year.

Notwithstanding the numerous complaints that have been already made, your Petitioners regret to state that the representations of the medical officers of unions have been overlooked, and that by recent Acts passed by your Honourable House, in utter disregard of all their claims, they have experienced additional hardship and injustice.

That the Health of Towns' Act, and the Act for the Prevention of Epidemic Diseases and the Removal of Nuisances, passed by your Honourable House during the last Session of Parliament, confer certain powers on the Boards of Guardians, and the New General Board of Health, in relation to sanitary purposes, in virtue of which the medical officers of unions have been called upon to perform the duties of officers of health, without any provision being made for payment for such duties. As these duties form no part of the contracted engagements of the medical officers with the Boards of Guardians, and are not referred to in the instructions of the Commissioners of Poor-Laws under which the Union Surgeons took office, your Petitioners consider that the orders issued by the Boards of Guardians in compliance with the instructions of the General Board of Health, are a direct violation of the rights of union surgeons as private citizens of the State.

That your Petitioners have already protested to the General Board of Health, and to the Poor-Law Board, against this new imposition of unrequited labour, and do hereby most respectfully repeat their protest to your Honourable House, and earnestly trust that your Honourable House will see fit, not only to amend laws so directly subversive of the rights of the subject, but will also undertake the revision of all other laws which

affect the position of the medical officers of unions, so that a system more conformable with justice and the true interests of the public may be established. Your Petitioners are convinced that under an improved system, equally regardful of the interests of the poor and of the medical officer, prompt and efficient attendance might be obtained in all cases for the former, whilst the just interests of the latter might be guaranteed, and that thereby the requirements of a true economy in the apportionment of the public funds might be secured, and the duties of an enlightened humanity worthily fulfilled.

That, as the principles of a new and improved system, your Petitioners are humbly of opinion,—

1st. That the payment for medical relief to the poor should be made from the Consolidated Fund.

2nd. That the remuneration should be fixed according to a settled plan or scale, and that the average payment in town and country districts should be at least 6s. per case.

3rd. That the appointment of medical officer to a district should be permanent, and subject only to be rescinded by the President of the Poor-Law Board, or by the director of a Board specially appointed, upon proved charge of neglect of duty, gross mal-practice, legal sentence inferring dishonour or crime, or other valid cause.

4th. That a general board should be established for the superintendence of the duties of the medical officers of unions, under a chief medical director, and a sufficient number of competent medical inspectors, to protect both the interests of the public and the profession.

That your Petitioners, seeing the perverse opposition by which the local boards have too often succeeded in rendering the instructions of the central board nugatory and void, are fearful that the Poor-Law Board has not sufficient power to remove the existing evils, and they therefore emphatically press upon your Honourable House the urgent necessity of considering their manifold wrongs and grievances; and your petitioners remembering that nearly 3,000,000 of Her Majesty's subjects are entrusted to their care and skill in every form of accident and disease, that they are often called upon singly, and at a moment's notice, to succour life under the most appalling and hazardous occurrences, and the high qualifications that are necessary from them for a due performance of their varied duties, and considering also the constant liability to pestilence, with all its fearful consequences, not only to themselves but also to their families, the numberless annoyances and harassing anxieties incidental to their arduous and responsible duties, the continual exposure to the vicissitudes of the climate and season, and the daily sacrifice of time, money, and strength, which their avocations necessarily incur, believe that they have paramount claims on the attention of your Honourable House, and they earnestly hope that your Honourable House will speedily take into your consideration their present position and claims, and amend a system so defective, unsatisfactory, and fruitful of injustice to all parties concerned in its operation, whereby your Honourable House will fulfil the noblest

functions of a philanthropic and parental legislature, will enlist the sympathies of the suffering poor, command the respect and confidence of the public, and win the gratitude of a numerous but oppressed body of public officers.

And your Petitioners, in conclusion, further pray your Honourable House that you will take into your consideration, as speedily as can be, and adopt measures to amend, not only the system of Poor-Law Medical Relief, but also to put on a more enlightened and satisfactory footing the laws and regulations relating to the education and control of the medical profession generally throughout England and Wales.

And your Petitioners will ever pray.

THOMAS HODGKIN, M.D.,

Chairman of the Committee.

ADOLPHUS BURNETT.

WILLIAM LOBB.

&c., &c., &c.

MEDICAL LEGISLATION.

MEMORIAL AND PETITION FROM WOLVERHAMPTON.

At a meeting of the medical practitioners residing in Wolverhampton and its vicinity, (convened by public advertisement) held on the 18th of April, at the South Staffordshire General Hospital, Dr. Topham in the chair, the following resolutions were unanimously adopted:—

Proposed by Mr. John Fowke, and seconded by Mr. Edwardes,—

“That this meeting considers that a measure recently proposed to be brought before the Legislature, entitled “Outline of a Bill for Regulating the Profession of Physic and Surgery,” is highly objectionable, as tending to degrade the general practitioners of medicine and surgery in this kingdom, and to prove injurious to the best interests of the public.”

Proposed by Mr. Dehane, and seconded by Mr. Cartwright,—

“That a memorial be presented to Sir George Grey, her Majesty's Secretary of State for the Home Department, together with a petition to the House of Commons, representing the views of the practitioners of medicine and surgery residing in Wolverhampton and its vicinity, in opposition to the creation of a College of General Practitioners, and expressing their conviction that the establishment of such additional Examining Board is totally unnecessary, as the Colleges of Physicians and Surgeons, if properly modified, contain all the elements requisite for examining and licensing in every branch of the profession.”

Proposed by Mr. Haslehust, and seconded by Mr. Coleman,—

“That the memorial and petition which have been read by Dr. Bell, be adopted, and that the memorial be transmitted to her Majesty's Secretary of State for the Home Department: that Mr. Thornley, one of the Members for the borough of Wolverhampton, be requested to present the petition to the House of Commons; and that Mr. Villiers, together with the

members for the southern division of the county, be requested to support the prayer of the petition."

Proposed by Mr. Dunn, and seconded by Mr. Gatis,—

"That the resolutions of this meeting be advertised in the *Lancet*, *Medical Gazette*, *Provincial Medical and Surgical Journal*, and in the *Staffordshire Advertiser*, and *Wolverhampton Chronicle*."

Proposed by Mr. Underhill, and seconded by Mr. Wright,—

"That Dr. Topham, Mr. Edwardes, Dr. Bell, Mr. Gatis, and Mr. Wright be appointed a committee, to carry these resolutions into effect."

Proposed by Mr. Edwardes, and seconded by Mr. Cooper,—

"That the cordial thanks of the meeting be given to Dr. Topham, for his able and efficient services in the chair."

JOHN TOPHAM, Chairman.

South Staffordshire General Hospital,
April 18, 1849.

GLOUCESTERSHIRE MEDICAL & SURGICAL ASSOCIATION.

To the Right Honourable Sir George Grey, Bart., M.P.,
Her Majesty's Secretary of State, &c., &c., &c.

The Memorial of the Council of the Gloucestershire Medical and Surgical Association,
Sheweth,—

That your Memorialists, in conjunction with the members of the Association which they represent, have for many years taken a deep interest in the important question of Medical Reform, and have from time to time memorialised the Crown and the Government on this subject.

Your Memorialists are of opinion that one of the evils of the medical profession is the number of corporate bodies empowered to grant diplomas and licences;—that the Colleges of Physicians and Surgeons of England, if rightly organized, are sufficient for the requirements of the profession and the public in this country;—that the proposed creation of a new institution for the enrolment of General Practitioners is uncalled for by any necessity, and that the establishment of another College, whilst it would increase the existing evil of corporate monopoly, would fail to effect the objects for which it was concerted.

That your Memorialists have read with much satisfaction a Memorial presented to you by the medical men of Manchester, in reference to certain "Outlines of a Bill for the regulation of Physic and Surgery," proposed by a conference of parties representing the Metropolitan Corporations and the National Institute.

Your Memorialists desire to record their approbation of the views and principles embodied in the *Manchester Memorial*; and they respectfully urge their truthfulness and importance upon your serious consideration.

Signed on behalf of the Council of the Gloucestershire Medical and Surgical Association.

T. WRIGHT, M.D., Cheltenham, President.
J. W. WILTON, Gloucester, Hon. Sec.

General Retrospect.

SURGERY.

REPEATED PUNCTURE OF THE BLADDER IN CONSEQUENCE OF RETENTION OF URINE.

By M. Velpeau.

A man aged 60 years had been lately admitted for treatment, with complete retention of urine for some days, caused by a stricture of long standing in the urethra. Repeated attempts having been made without effect to introduce catheters and bougies, M. Velpeau hastened to puncture the bladder above the pubes. There was nothing particular in the operation; the bladder was emptied, the patient relieved, and a gum elastic catheter left in the opening. On the following day, (or the third day,) the instrument was displaced from the bladder by some hasty movement of the patient and the condition of retention reproduced; M. Velpeau had then to repeat the operation, and this was done forty-eight hours after the first. The original opening had been made in the median line, a little distance from the pubes; the second was made upon the right side about two inches from the first. A long gum elastic sound was left as before, in the opening, and due precautions taken to prevent a recurrence of the accident. The operation was performed five or six days ago, and the patient does not appear to be going on badly, but the hypogastric region is hard. Is this hardness the result of an effusion of urine occurring after the escape of the instrument, or of partial peritonitis independent of this cause? At this moment it is impossible to say. M. Velpeau endeavours each day to pass small bougies through the natural passage, but the contraction is such that these instruments are at present unable to overcome the obstacle, and he is content to have a bougie pressing against the stricture since he is unable to pass one beyond it.—*Annales de Therapeutique*, Mars.

MALIGNANT ULCERATION OF THE THUMB IN A CHILD: CURE BY THE USE OF CREOSOTE.

A child, 5 years of age, of delicate constitution, and remarkable intelligence, was pricked in the thumb of the right hand by the point of a brace buckle; suppuration ensued, succeeded by a phagadenic ulceration, which in a short time destroyed the extreme phalanx. It extended thence to the next phalanx, which in its turn became disorganized, necrosed, and expelled. The disorder then spread to the soft parts in the metacarpal region of the thumb, and threatened them in the same way. In this stage it was brought to the hospital. On examining the stump there was found an ulcerated surface about the size of a two-franc piece, with a deep base, greyish and foul, surrounded by a red disc, and painful. Cauterization with nitrate of silver, the acid nitrate of mercury, and even the red-hot iron, was tried without effect. Whilst hesitating some days respecting amputation, and also trying the effect of various remedies, it was determined, as a last resource, to apply fomentations of pure creosote. The effect produced was remarkable; on the following day the ulcer was

no longer painful, its surface had ceased to spread, and was of a bright red colour; in a few days the wound cicatrized, and the little patient was cured. The metacarpal bone below the cicatrix is evidently swollen.—*Annales de Thérapeutique*, Mars.

CREOSOTE GARGLE IN MERCURIAL SALIVATION.

Dr. Faulcon narrates the following as an instance of a successful mode of treating mercurial salivation:—

On the 25th of September, 1842, I was called in consultation to J. S., who was suffering from severe salivation, and as some of the usual remedies in such cases had been used without benefit in this disease, (for such it certainly is,) and as the muscles of the jaws were rapidly stiffening, so as scarcely to permit his speaking with distinctness, I suggested to his attending physician the use of the following gargle:—Creosote, half a drachm, sage tea one pint. To be used every hour during that day, and its effects accurately noted. In thirty minutes after its first application he felt a sharp tingling sensation along the angles of both jaws, and a slight convulsive motion in the muscles of the lower jaw. Shortly after the appearance of this last sensation, there was a marked relaxation of all the muscles of the face, and he expressed himself as feeling better (locally,) than he had done for many days. In the evening there was a very great decline of the salivary discharge, and a great improvement in the appearance of the mucous membrane of the mouth and palatine region, which, prior to its application, wore that aspect so indicative of a near approach to sloughing. A few days continuance of the gargle effected a complete recovery.—*Philadelphia Medical Journal*, November.

OBSTETRIC MEDICINE.

TREATMENT OF HYDROCELE IN INFANTS.

Dr. Coley states that he at one time believed that all cases of hydrocele in infants were curable byunction with compound mercurial liniment, or by a lotion of muriate of ammonia. A wider experience has convinced him that many cases will resist such treatment, but he has found that such may be speedily cured by the application of leeches, which he is induced to apply, from the idea that the fluid is produced by an inflamed state of the tunica vaginalis.—*Obstetric Record*, Feb. 1st, 1849.

TOXICOLOGY.

POISONING BY OPIUM: GALVANISM.

Mr. Stiff records the following case in the *Lancet* of March 24th:—He was summoned to a woman aged 54, in a state of coma. She was insensible, with bloated face, greatly contracted pupils, relaxed muscles, pulse 100, feeble. The stomach pump was used, and the contents of the stomach exhaled a strong odour of opium. A mixture of compound spirit of ammonia and lavender was injected. At five p.m., no visible improvement having taken place, electro-galvanism was resorted to. The currents were variously applied by the sponge, for half an hour, to the diaphragm, spine, axilla, sacrum, legs, and face. The effect was striking: the involuntary action first induced was succeeded by decided evidence of occasional

consciousness; resistance was also offered to the moving of the arm, and she turned on her side and back alternately. We now desisted for ten minutes. Neither the strong sinapisms nor the ammonia liniment had produced any effect; the mouth was now firmly shut, and she began again to relapse into complete insensibility. The galvanism was resumed for half an hour or more, but its effect was by no means so great, and she seemed to be sinking. Coffee was swallowed. At eight p.m., some improvement, as warmth and consciousness, were noticed. Galvanism applied every ten minutes with increasing benefit. Ten p.m., had taken a breakfast-cup of coffee, and pulse rallying. The improvement continued but consciousness was very imperfect until leeches were applied to the temples, after which the amendment became very perceptible and persistent. The case is reported as an instance of the important benefit derived from galvanism under appearances of the most unpromising kind.

POISONING BY SULPHURIC ACID INTRODUCED INTO THE RECTUM.

M. Pinjon, of Saint Etienne, has given in the *Journ. de Méd., de Lyon*, a detailed account of the history of a case in which a wife attempted to destroy her husband, first by poisoned wine, and then by the use of enemata, containing sulphuric acid. The symptoms, as might be anticipated, were those of extreme irritation of the bowels within, and of the external parts adjacent to the anus. The case was treated without any suspicion of the cause of the patient's sufferings; nor was the real nature of the case discovered till three months had expired. About the fourteenth day from the commencement of the symptoms, a portion of intestine was passed by stool, after which the amendment, though very slow, was gradual, and a complete recovery took place. The event occurred in the end of 1844, and four years after the man (Maisonneuve,) was examined by M. Pinjon, and found to enjoy good health, though with some peculiarities in the action of the bowels. The account before us does not enter into any detail of the evidence on which the charge of poisoning is founded, reference being made only to the effect produced on the straw of the chair on which he sat when the first enema was administered, and on the curtain of the bed on which he lay where the second was used.

Two cases besides are referred to in which sulphuric acid was thrown into the rectum, and yet recovery for the time took place, one detailed by M. Fouquier, in the *Gazette des Hôpitaux*, 1846, p. 575, the other in the *Annales de Thérapeutique*, Vol. ii., p. 457.—*Annales de Thér.*, Dec., 1848, Jan., 1849, and *Month. Journ.*

CASE OF POISONING BY CREOSOTE.

On January 17th, Mr. Macnamara, was called to see Mrs. M—, the wife of a respectable tradesman, and on his arrival at the house, he found her presenting the following symptoms:—She was lying in her bed in a state of profound stupor, from which she could with difficulty be aroused for a few minutes, but only again to relapse into her former state of unconsciousness. Her countenance was fuller and more flushed than it naturally appeared. Her eyes were fixed,

but the pupils were neither dilated nor contracted. The pulse was slow and laboured; the heart's action remarkably slow and weak; the stomach was inclined to be sick, and the ejecta bore a strong smell of creosote. When aroused, her chief complaints were of vertigo and general uneasiness in the head, as also of burning pain along the œsophageal track, and in the stomach. On inquiry, he ascertained that for the last twenty-four hours, she had been suffering severely from toothache, to relieve which she had recourse to creosote, in the application of which she had been most unsparing, and that her present symptoms had gradually supervened, increasing in intensity up to the period of his arrival.

The treatment adopted consisted of the employment of mustard emetics, sinapisms over the cardiac and epigastric regions, with copious dashings of cold water in the face; the indications being, in the writer's opinion, to remove the poisonous effects of the creosote by the exhibition of medicines that would rouse the vital energies of the patient, at the same time that it removed from the stomach any of the creosote that might have accidentally found its way there. This line of treatment was attended with the happiest results; the stupor was completely removed, and the only symptom that remained was severe pain in the stomach, which was completely relieved by the administration of an anodyne draught, and the patient recovered without any other untoward symptoms than those consequent on a slight febrile disturbance, which rapidly yielded to antimonials, followed by purgatives.

The circumstance that renders this case most interesting, is the extreme rarity of cases of poisoning by creosote, no other case that the writer is aware of having occurred, but one which unfortunately proved fatal, and the particulars of which have not been preserved. It is recorded in the *Liverpool Mercury*, and transferred thence to the columns of the *Times*, June 17, 1839, and it is referred to by Dr. Pereira, in his talented work on the *Materia Medica*. This case differs from that which is here brought forward in this particular, that a large quantity, amounting to two drachms, had been swallowed. In this case the writer attributes the injurious effects that ensued more to the prolonged inhalation of the creosote than to the actual quantity that got into the stomach; that some, however, did get into that viscus, is, in his opinion, evidenced by the great pain referred to the stomach and œsophageal track. Another interesting feature in this case, and one that might seem to give some colour to the doctrine of *similia similibus curantur*, is the presence of vomiting, creosote being so vaunted for its power in allaying that symptom. The vomiting, however, is clearly referable to the irritating effects that the creosote produced on the coats of the stomach.—*Dublin Medical Press*, March 7th.

MEDICAL JURISPRUDENCE.

NEW SIGN THAT A CHILD HAS BEEN BORN ALIVE.

Dr. Virchow has announced that the presence of uric acid in the kidney, which may be detected with the naked eye, is conclusive of a child having been born alive. His conclusions are—

1. That uric acid deposit is never found in children born dead, or who have died within forty-eight hours after birth.

2. That the deposit does not occur before forty-eight hours after birth.

3. That it is not generally found later than the twentieth day after birth.—*Medical Times*, Jan. 20th.

Medical Intelligence.

TESTIMONIAL TO JOHN FOWKE, ESQ.

A gratifying instance of the estimation in which members of our profession are sometimes held by their immediate patients and friends, has recently occurred at Wolverhampton. The extraordinary sum of £1583 has been raised by subscription, and presented to Mr. John Fowke on his retirement from the duties of the General Dispensary, as a testimonial from the subscribers of "their estimation of his high medical character and abilities, and of the disinterested manner in which they have always been applied to the benefit of the community."

LIFE-ASSURANCE OFFICES.

REMUNERATION OF MEDICAL MEN FOR THEIR REPORTS.

In the list of Life-Assurance Offices which have adopted the principle of remunerating medical men, as given in a late number of the *Journal*, the Medical Legal and General Mutual Life Office, 126, Strand, London, who pay a fee of one guinea for every certificate, *whether favourable or not*, was accidentally omitted.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted members Friday, April 13th:—J. A. S. Addison, R. W. Broster, G. A. Sheppard, J. B. Sheppard, J. German, T. B. Kenderdine, C. M. Smith.

Friday, April 20th:—E. W. Mayne, J. F. Pritchard, H. E. Brameld, A. Law, W. Tidmas, J. C. Lynch, W. Tomlin, E. Younge, W. Harrison, T. O'K. Gordon, C. A. Allen, H. Briggs.

The following gentlemen, all members of the College, were admitted Fellows at the meeting of the Council on the 11th of April:—Edgar Barker, Edgware Road, (diploma dated March 5th, 1824); Henry Butler, Hobart Town, Van Dieman's Land, (July 28th, 1843); William Henry Colborne, Chippenham, (July 17th, 1846); John Cooper Forster, Wellington Street, Southwark, (November 15th, 1844); John Havers, Bedford Place, Russell Square, (December 15th, 1837); Thomas Brooks Larkins, Hon. East India Company's Bombay Service, (December 23rd, 1836); and Arthur Sarjeant, Meriden, Warwickshire, (Nov. 19th, 1841.)

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates Thursday, April 12th, 1849:—Edward Batt, Witney, Oxon; Henry William Beriase, Helston; Herbert Brown, Tonbridge;

John Davis, Wreckenton; Francis Edward Goldsmith, Boston; Griffith Hooper Griffiths, Cheltenham; John Robinson, Midhurst; Arthur Rudge, Fakenham; James Cummin Toshack, South Shields; Charles Augustus West, Camelford, Cornwall.

Gentlemen admitted Licentiate Thursday, April 19th, 1849:—James William Crow, Gorleston, Suffolk; John Clarke, Greenham, Berks; Frederick Duke, Hastings; Philip William Govett, Plymouth; John Higginbottom, jun., Nottingham; Thomas Hutchinson, Camborne, Cornwall; James Newnham, Lyme Regis; William Matthew Sheppard, Fulham; Isaac Tucker, Westbury, Leigh; David Morris Thomas, Cwmaman, Carmarthen; Edmund Whitaker, Bacup, Lancashire; Thomas John Warburton, Betley, Staffordshire.

OBITUARY.

Died, January 17th, at Graham's Town, Cape of Good Hope, in his 34th year, Edward Russ, Esq., surgeon, late of Castle Cary, Somerset.

April 10th, at Nuneaton, in the 79th year of his age, John Bond, Esq., surgeon.

April 22nd, at Delph Cottage, Cheshire, aged 61, Brereton Nightingall, Esq., formerly resident surgeon of the Liverpool Fever Hospital and Workhouse.

April 23rd, W. Warden, M.D., surgeon to Her Majesty's Dock Yard, Chatham, in his 72nd year.

Lately, Dr. George Gardener, Superintendent of the Botanic Garden, Peradenia, Kandy, Ceylon.

BOOKS RECEIVED.

The Dependancies of Animal Motion on the Law of Gravity. By Henry Wigglesworth, M.B., &c. Part II. London: Bailliere. 1849. 8vo. pp. 210.

Lectures on the Causes and Treatment of Ulcers of the Lower Extremity, delivered at the London Hospital, during the Summer of 1848. By George Critchett, Esq., F.R.C.S., Surgeon to the Royal London Ophthalmic Hospital, &c. London: Churchill. 1849. 8vo. pp. 121.

Parturition, and the Principles and Practice of Obstetrics. By W. Tyler Smith, M.D., Lond., Lecturer on Obstetrics in the Hunterian School of Medicine. London: Churchill. 1849. Fcap. 8vo., pp. 395.

A Short Sketch of the Life and Writings of the late Joseph Clarke, Esq., M.D., Vice-President of the Royal Irish Academy, and formerly Master of the Dublin Lying-in-Hospital, &c. &c. By Robert Collins, M.D., President of the King's and Queen's College of Physicians in Ireland, formerly Master of the Dublin Lying-in-Hospital, &c. &c. London: Longman. 1849. 8vo. pp. 88.

Anæmia, and its Consequences: Enlargement of the Thyroid Gland and Eyeballs. By James Begbie, M.D., F.R.S.E., Fellow of the Royal College of Physicians, and Vice-President of the Medico-Chirurgical Society of Edinburgh. (Read to the Medico-Chirurgical Society of Edinburgh, 3rd January, 1849.) Edinburgh: Sutherland and Knox. 1849. 8vo. pp. 15.

Questions and Observations in Hygiene, &c. By F. James Brown, M.D., Lond., &c., Assistant Surgeon R.N. London: Churchill. 1849. pp. 64.

Report of the Epidemic Cholera, as it has appeared in the territories subject to the Presidency of Fort St.

George. By William Scott, Surgeon, &c. Edinburgh: Blackwood; London: Murray. 1849. 8vo. pp. 212. Map.

Practical Observations on the Prevention, Causes, and Treatment of Curvatures of the Spine, &c. By Samuel Hare, surgeon. Third edition. London: Churchill. 1849. 8vo. pp. 245. Plates.

A Practical Treatise on Morbus Coxarius, or Hip-Joint Disease, &c. By William C. Hugman, M.R.C.S., Surgeon to the Verrall Institution for the Treatment of Spinal Diseases and Distortions, &c. London: Highley. 1849. 8vo. pp. 81. Plates.

Proceedings of the Westminster Medical Society. Session. 1848-49. 8vo. pp. 20.

Hints on Obstetric Practice, with Illustrations. By John Brenner, surgeon, Newtyle. Part I. Edinburgh: MacLachlan and Stewart. 1849. 8vo. pp. 98.

On Healthy and Diseased Structure, and the true Principle of Treatment for the Cure of Disease, especially Consumption and Scrofula, founded on Microscopical Analysis. By William Addison, M.D., F.R.S., Licentiate of the Royal College of Physicians. London: Churchill. 1849. 8vo. pp. 320.

The Medical Remembrancer, &c. By Edward B. L. Shaw, M.R.C.S., and L.A.S. Third edition. London: Churchill. 1849. pp. 108.

Lectures on the Parts concerned in the Operations of the Eye, and on the Structure of the Retina, &c. By William Bowman, F.R.S., F.R.C.S.E., &c. London: Longman. 1849. 8vo. pp. 143. Illustrations.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

ANNIVERSARY MEETING.

The Anniversary Meeting of the Provincial Medical and Surgical Association is appointed to be held at Worcester, on Wednesday, August 1st, and Thursday, August 2nd, when Chas. Hastings, M.D., of Worcester, will preside.

NOTICE TO MEMBERS.

Gentlemen who have not yet paid their subscription for the current year, or who are in arrears, are requested immediately to forward the amount due, either to the Treasurer or Secretary of the Association, as the accounts are now about to be made up for the Annual Meeting.

ROBERT J. N. STREETEN,
Secretary.

ERRATUM.

Page 206, col. 2, line 24, for "I should think it desirable to bleed," read "I should think it not desirable, &c."

TO CORRESPONDENTS.

Communications have been received from Mr. H. Williams; Mr. Humpage; Mr. F. S. Garlick; Dr. Copeman; Æsculapius; Mr. Colthurst; Mr. Bartrum; Mr. G. Edwards; Mr. Markwick; Dr. Banks; Mr. Freer; Mr. Swayne; Mr. Wilton; Mr. Cornish; Dr. Simpson; Mr. Kelson.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

ON ANTEVERSION OF THE UTERUS.

By SAMUEL EDWARDS, M.D.,

Formerly Resident Medical Officer to the Edinburgh General Lying-in Hospital, and late Physician to the Eastern Dispensary of Bath, and to the Bath Ear and Eye Infirmary, &c.

In a science of such vast importance to the well being of mankind as that of medicine, whenever there exists a doubt as to theory or practice, all will allow it to be an imperative duty incumbent upon every true lover of his art or of his kind, to state all such facts, as, arising within each one's own experience, may tend to prove or disprove the existence of a disease, and relieve it, if possible, from the imputation of being a mere *vexata questio*; and by establishing it amongst the list of those ills to which the human frame is liable, assist at the same time in the discovery of a ready diagnosis and a philosophical mode of treatment. For this reason I am desirous of recording the particulars of a case of anteversion of the uterus which has occurred to me subsequent to one which I published in the pages of the *Lancet* in the year 1846. In that paper I was led to make the following remark:—"The recital of numerous cases of anteversion of the uterus, has at length, I believe, settled the question as to its existence at all, in the minds of almost all medical practitioners; and although it must be allowed that it is an affection, in its full extent, rarely met with, and requiring most careful examination, (especially in its earlier stages, when it may indeed be passed over by the physician, and be by the patient unheeded,) for its correct diagnosis, yet, from frequent opportunities of investigation, I am convinced the displacement, in a slight degree, is of more frequent occurrence than it is usually considered." Since that time, I have, however, met with several gentlemen of great experience in their profession, who, because the disease has not been thrust prominently before their eyes, have been led without taking the trouble of investigating their cases deeply, to doubt the existence of such a malady at all. I am quite aware that when the disease exists only in a slight degree, the symptoms are neither very disturbing to the patient nor prominent to the practitioner, especially if of superficial perceptions; and in more severe cases, those symptoms, when seen, may

be saddled upon other maladies. Still a careful examination per vaginam, will readily disclose the nature of the disease, and if an attempt be made to examine the "os uteri" with the speculum, a difficulty will be experienced and not to be overcome, which will declare the fact of, at any rate, an altered position in the uterine body and neck.

The patient referred to, Martha E., a poor woman, married, aged 31, but without children, of a large frame, but thin, and lymphatic in temperament, applied to me for advice in September 1847. She had been married four years, and during this time had been regular in her monthly periods until the last nine months, which had at first induced her to believe herself pregnant; still a complete cessation had not taken place, only a great diminution in quantity, which was also altered in quality. Soon after, she began to complain of pain and weakness in the lumbar region, with a sense of "bearing down," also heat and weight over the pubes and in the groins. This continued between six and seven months when additional symptoms made their appearance and remained up to my first seeing her. Leucorrhœa, of a yellowish hue and tenacious in consistency, set in, occasionally streaked with a little blood; a sense of fulness about the rectum which was always distended more or less from fecal accumulations, she being generally obliged to resort to aperient pills before obtaining relief from the bowels. That, however, which most annoyed her, was the irritation about the bladder and the almost constant desire to pass urine, with a difficulty and pain in so doing. This latter was so severe and troublesome as to be the chief cause of her applying for relief, especially as it had been increasing the previous fortnight. Almost all her symptoms, she stated, were relieved by the recumbent posture; walking affected her a good deal, but standing still, or straining at stool, and also urinating, always produced great increase in her distress. Her general health is not good; her face is pale and anxious, and to use her own phrase, she "is almost tired out" by the constant uneasiness. Complaints of various symptoms of dyspepsia,—e. g., flatulency, nausea, and sense of weight and uneasiness at the epigastrium immediately after eating. The tongue is flabby, indented by the teeth, and coated with a creamy-looking fur; for more than a week past the breasts seemed to have sympathized with the irritable condition of the uterus,—having become fuller than usual,

accompanied with darting pains, especially at night. On considering over the above symptoms I was led to believe that it was a case of ulceration of the neck of the uterus, and that the irritability of the bladder might be owing to other causes. The urine gave out a copious deposit of the alkaline lithates. On examination, I found the vagina of higher temperature than usual; the finger could with very great difficulty reach the cervix, the extremity of which was directed upwards and backwards towards the sacrum, so much so that the "os" was not within reach. The cervix was enlarged, but little if at all more resistant than usual. On the finger being directed to the anterior wall of the vagina, a firm tumour was felt, evidently the body of the uterus much enlarged, which is pressing down on the lower part of the bladder, which of course left no doubt as to the nature of the case I had to deal with. The leucorrhœa at this time was trifling. On introducing the speculum I found the upper part of the vagina somewhat congested, also the cervix which was of a florid hue. There was no possibility of seeing the "os uteri," but the patient being on her back and the index finger of the left hand being introduced into the rectum, I was enabled to depress the cervix to such an extent, as to bring the edge of an ulcerated surface into view. The congested and heated condition of the cervix induced me to scarify it freely, which quickly did the office of many leeches without the tediousness of them. Two pills of extract of colocynth, and blue pill with extract of henbane, to be taken at once, to be followed by an enema. The recumbent position to be strictly adhered to.

16th. The bowels have been freely moved without effort to the patient; the calls to micturition, however, have been very frequent, but a difficulty almost amounting to complete obstruction exists within the last few hours; only a few drops passed at a time, and there being a considerable quantity in the bladder, it was drawn off by a catheter. The next day (17th) the same state of things existed; the urine had been drawn off three times altogether, and I determined to endeavour to rectify the position by manual interference, especially as my patient became feverish and extremely excited. Lying on her back, with the pelvis elevated, and thighs flexed, I introduced the fore-finger of the right hand up to the cervix, and with the left made firm pressure over the hypogastric region, and as it were, behind the pelvis. By this means the cervix was so depressed that the finger could be passed to the posterior aspect of it, and thus hooked, it was drawn downwards and forwards. This favourable position was not wholly maintained on the pressure being removed, I therefore applied a compress and bandage over the hypogastric region, as low as possible, which appeared beyond my expectation to second my efforts. On introducing the speculum to examine, if possible, the "os," and the whole of the ulceration, I was enabled so to do with the aid of the finger in the rectum. (I may remark this female's pelvis was very capacious, and vagina relaxed.) The ulceration I found chiefly on the anterior portion, extending to the edge of the os uteri, it was above the size of a shilling, and covered with small bleeding granulations.

Viewing in this ulceration the foundation of all the evil, I immediately commenced the treatment by freely applying nitrate of silver to the granulating surface, as likewise to the hypertrophied neck, and ordering an injection of diluted compound alum solution. The pills were requested to be taken every night, both as an alterative, and for the purpose of making defæcation *as easy* as possible, but above all, the recumbent position, and as much as possible on the back. The next day, after a tolerably easy night, I found the chief symptoms all better, with the exception of the leucorrhœa, which had increased, but which is usual, (I have found,) at first, after the application of the nitrate of silver. Micturition had been rather frequent, but without pain. The pills and injection to be continued.

On the fifth day I again examined with the speculum, and was able to get at the seat of mischief, without any aid through the rectum. The vesical symptoms had all subsided, but she still felt the bearing-down sensation on assuming the upright position. The cervix uteri still continues much larger than ordinary, but the ulcer is improved in appearance, and bleeds but little under the pressure of the speculum. The caustic was freely applied, and repeated every fifth or eighth day, for five weeks subsequently, when the ulceration had disappeared, and the healthy character of the cervix, as to size and colour, had been restored. The uterus had gradually returned to its normal position, which improvement took place progressively in keeping with the diminution in the consistency and size of the cervix. Her general health had improved, still she complained of weakness and deficient appetite, for which I prescribed iron and quinine, together with an occasional aperient of the compound rhubarb pill, with hyoscyamus. At the end of eight weeks there was continued improvement; the catamenia had returned, improved in quantity and quality, and without pain in its flow, which had been the case for months prior to treatment; all local irritability ceased, and the leucorrhœa had completely subsided. The cervix uteri, although probably more voluminous than usual, was soft, and its mucous membrane of its natural pale hue. The dyspeptic symptoms rapidly gave way, and she regained her former health and strength.

REMARKS.

The symptoms of anteversion, as I before remarked, are not always very prominent, providing the displacement has been gradual, but when it has taken place suddenly, as many cases recorded show, the general symptoms from the first moment are most severe and distressing. No age seems exempt from it, as it has been observed from the earliest to the latest periods of life. Pregnancy, in its first month or two, may prove a predisposing cause, acting in the same way as the congested and hypertrophied condition of the uterus, in the case before us, appears to have done. The after progress, then, of pregnancy, would in all probability act as its cure. Dr. Ashwell states that "the direct causes, those producing immediate displacement, are—falls, violent and sudden muscular efforts, straining at

motion, or in the evacuation of the bladder." From what I have been able to gather from the cases I have myself seen, as also from various published ones, it appears extremely doubtful if these direct causes ever act without the uterus is predisposed to such an accident, either from hypertrophy, (very rarely pregnancy) or a tubercular condition of the uterus, especially of its anterior wall. Tumours in the pelvis, posterior to the uterus, have been said to act as a direct cause, by pushing the fundus forwards. In the case above no cause could be traced other than congestion and hypertrophy, induced by ulceration of the uterine neck. The displacement appeared to have been so gradual that but little attention was aroused until it had become so complete as to interfere with the regular function of the bladder. Within the last four months I have been attending a lady in my neighbourhood with very severe ulceration, accompanied with great hypertrophy of the cervix uteri; it had evidently existed for more than a twelvemonth, occasioning three miscarriages, and at the time I first saw her the symptoms of early gradual displacement were exhibiting themselves. For the first month of treatment there was no possibility of examining the "os" through the speculum, but subsequently, on the ulceration and hypertrophy being partially cured, there existed no difficulty in ascertaining that the posterior aspect of the cervix was also ulcerated, though to a trivial extent compared with that on the anterior. The symptoms of irritability of the bladder had at this time also completely subsided. From increased experience of diseases of the uterus, and especially of simple ulceration inducing hypertrophy of that viscus, I am convinced that anteversion of the matrix, in a slight degree, is a far more frequent affection than is usually deemed, certainly according to my later experience, greatly more so than retroversion. I have frequently seen cases, such as that mentioned above of Mrs. S., where the early symptoms existed, and in which, had the congested hypertrophied condition of the uterus been allowed to go on untreated, I believe the same result would have been brought about as was seen in Martha E., at all events, had any exciting cause brought it into action, such as a fall, violent sickness, &c., &c. This brings to my recollection the case of a patient (the Hon. Mrs. M.,) whom I attended last year with ulceration and a hypertrophied condition of the womb, which had existed for four years. This lady suffered for many months from all the chief symptoms of anteversion, in a slight degree, (especially the urinary,) after any unusual exertion, either in travelling or dancing, which compelled her to keep the recumbent posture for at least two days after. On two of these occasions (the result of her imprudence,) I had the opportunity, by examination, of verifying the cause of those unpleasant symptoms to be slight displacement. The presumptive symptoms of anteversion of the womb are very similar

to those seen in the more severe cases of simple ulceration, with the exception of irritability of the bladder and rectum, and difficulty of micturition and defæcation, although undoubted cases of anteversion of a complete character have occurred, without either of these symptoms having existed. These presumptive symptoms,—*e. g.*, dull, aching, lumbar pain, "bearing down" pain in the upper hypogastric region shooting down the thighs, leucorrhœa, &c., imperatively demand an examination per vaginam, both by the "toucher" and speculum, and not a blind resort to astringent injections for the relief of leucorrhœa, which, in the majority of cases, is a mere symptom of a worse evil, and which, if allowed to go on, may induce obstinate hypertrophy and displacements in its train, as the above cases show. With respect to the *diagnosis* of anteversion, very little difficulty I conceive exists, after a careful examination per vaginam. The cervix will be found high, sometimes with difficulty reached; the extremity or "os" will be pointed towards the sacrum, and applied against it. An examination by the rectum will make this evident, if the situation of the cervix is too high to be clearly made out by the vagina. In the anterior wall of the vagina, a tumour or prominence will be detected pressing against the lower part of the bladder, which, on accurate investigation, may be traced to be continuous with the cervix, in fact, the fundus uteri. This tumour anteriorly may be felt very readily by passing a bougie into the bladder. It is scarcely possible to conceive how such a prominence in the bladder could be mistaken for a stone in that viscus, but such has been the case, and the operation performed for its removal, the death of the patient alone having revealed the *true* nature of the malady. Such sad experience teaches a useful lesson as to hasty and erroneous diagnosis, such as is too often made; it is to be feared that practitioners are too frequently apt to neglect the education of the organ of perception—a faculty of the mind perhaps the most useful to the physician and surgeon, and one, the eager cultivation of which the student at the bed-side should keep constantly in view, in order that clinical experience may turn to usefulness and success in practice. The symptoms I have called presumptive will lend their aid, but the diagnosis can scarcely be difficult with the physical symptoms known. From retroversion, anteflexion, and other displacements, as also from pelvic and other tumours, anteversion can scarcely be confounded after a careful examination.

The *treatment* of cases of the slighter kind require but little for their rectification other than the recumbent position, (which is a *sine quâ non* in all cases,) and the rectum kept empty by means of mild aperients and enemata; should much local or general irritability exist, an anodyne of henbane or morphia will be of service. The predisposing cause should, however, always be held in view. If inflammatory congestion

exist, antiphlogistic treatment, leeches or scarifications, with salines and alterative doses of mercury, will be found useful. If there be simple ulceration, with induration and hypertrophy of the cervix, subsequent appropriate treatment should be put in force, by caustics and astringent injections, especially of zinc, alum, or tannin; the latter, when applied by means of a sponge or large camel's hair pencil, through the speculum in a concentrated solution, to the ulcer after it has been brought to a healthy condition by lunar caustic, I have seen very rapidly to cause it to cicatrize. In the severer cases, however, if the milder treatment be of no avail, and the pain and difficulty of micturition be great, requiring the constant aid of the catheter, an attempt to restore the structure of parts should be made. The rectum having been emptied of its contents by an enema, the patient placed on her back, with her thighs flexed and pelvis elevated, one or two fingers of the right hand should be introduced, and an attempt made to *hook* the index round the cervix, at the same time pressure must be made upon the fundus, which will facilitate the object; gentle traction should then be made upon the cervix, and the depression will, in all probability, be easy; if, however, the cervix cannot be thus reached, an instrument similar to the one invented by Madame Boivin may be employed, but will require caution. With regard to pessaries, I say nothing in reference to their use in preventing a recurrence of anteversion, as I cannot conceive of their capability of being, in the slightest degree, serviceable. After the parts have regained their normal structure and position, mineral tonic remedies, with astringent injections, cold hip-baths, or sea bathing, (where the powers of the patient will permit,) will more completely answer this end, by giving tone to the system, and thereby overcoming a relaxation of the contiguous parts, which always, in a greater or less degree, precedes the accident.

7, Upper George Street, Bryanston Square,

February, 1849.

CLINICAL ILLUSTRATIONS.

CANCER OF THE UTERUS, BLADDER, &c.: CASE AND REMARKS

By EDWARD BALLARD, M.D., Leamington,

Late Senior Physician to the St. Pancras Royal General Dispensary, and Medical Tutor in University College, London.

The last case which I recorded was one in which the cancer not only affected the body of the uterus, but this alone. That which I am now about to relate illustrates the more ordinary form of the disease,—namely, when it first attacks the cervix, and in which its ravages are chiefly carried on in this portion of the

organ. I have selected this case, although I had no opportunity of seeing the termination, because it exhibits the most important and characteristic features of the affection, and also some interesting complications.

CASE.

Miscarriages, &c.; Menorrhagia; Vaginal Discharge; Lacerating Pain; difficult Defecation; Ulceration of Cervix Uteri; Hematuria and disordered Micturition; Cancer of Bladder; Edema of Leg; Ascites, &c.

S. H., aged 33 years, residing in an unhealthy street in St. Pancras parish, placed herself under my care at the St. Pancras Dispensary, on September 1st, 1846. She had a fine fair skin, and dark fine hair. No hereditary taint. Has not undergone any considerable amount of privation, but has been often without sufficient clothing in the winter. The catamenia commenced at twelve years of age; the discharge used always to be abundant, and she used to suffer much pain in the back; it was not clotted. Her courses never recurred regularly, but at intervals, varying from three to thirteen months, *except when suckling the first four of her children*, when they occurred at intervals of three weeks, lasting from five to nine days; they occasionally appeared also while she was nursing her other children. She menstruated once when pregnant with twins. She married at the age of seventeen years, and her first child was born eleven months afterwards. She had four more within the next seven years, and then for the first time suffered a miscarriage at nine weeks, but at that time lost but little blood. The next year she was confined with twins, and subsequently had two other children, her last labour occurring in July, 1844. This last child lived but a few minutes after his birth. To the particulars of this pregnancy and labour I shall again recur.

On enquiring into her previous history, she stated that she had always been "very nervous," and although never subject to fits, the physicians who saw her at St. Bartholomew's Hospital regarded her as hysterical. It appears that when a child she received a severe burn over the right shoulder and arm. So long as she could recollect, her bowels have been habitually much relaxed, and she has been subject to pains under the left breast, shooting through to the left scapula. She has often been subject to passing "red sand," and also to difficult micturition. This symptom has not appeared so frequently of late, although with the progress of her disease the difficulty of micturition increased.

About two years ago, when two months advanced in her last pregnancy, she began to suffer from a discharge of blood, accompanied by bearing down pains, like labour pains. This continued throughout the pregnancy, but became much more serious during the three last months of it. She was attended in her confinement by a midwife, and in consequence of improper manipulation, as it is supposed, the neck of the uterus became torn. This is the report of the medical gentleman who was subsequently called in.

He stated to me that he believed there was a partial placental presentation. He thought that the tearing of the cervix might have been due to the presence of commencing malignant disease. After her labours she was attacked with "inflammation of the womb," for which she was leeches and blistered. In eight or nine days she stated that "an abscess formed and broke, discharging a quantity of foetid, yellow, and watery matter," and caustic used to be applied through the speculum. Since this period she has never been free from a vaginal discharge, and has not menstruated with regularity. She miscarried twice in the autumn of last year, and at the close of it, entered St. Bartholomew's Hospital, where she was said to be labouring under "disease of the womb." Last January, after she left the hospital, she was seized suddenly one night with flooding, and this continued more or less till March. It was followed by a vaginal discharge, which, however, did not assume the cancerous odour till two months ago. Shortly before the flooding she began to experience a difficulty in passing her stools. About February, her complexion was first noticed to become sallow, accompanying pallidity, from the loss of blood. Six months ago there was a temporary swelling of the left leg and thigh.

She is now moderately emaciated; her countenance pale, waxy, and sallow. For the last three months she has complained of an aching gnawing pain above the crest of the left ileum, extending to the groin, and during the last two months, to the inner side of the thigh and knee, accompanied with tenderness; and there are some swellings in the groin. Almost ever since her last labour she has suffered from shooting pains from the vulva through the pelvis to the lower part of the back, so severe as to cause her to start up if she be sitting or lying. There have been also aching, shooting, and bearing down pains about the lower part of the abdomen. The lancinating pelvic pains have been much more severe of late. She spends the greater part of the day in bed because her back is then easier, and sitting induces the pain in the groin. She has been taking opium in quantities of three or four grains daily, for the last six months. Her appetite has fallen off; but she suffers from thirst. There are pains around the navel, with borborygmi, and occasionally under the left breast, and there is tenderness at the bottom of the belly and over all the left side of the abdomen. She frequently vomits in the morning. Bowels have been constive ever since her labour; the stools are hard and lumpy, passed with difficulty and pain. There is much difficulty in micturition, and the urine is scanty—sometimes not more than a tea-cupful in a day. The vaginal discharge is abundant; not mucous, but watery, and of a reddish colour. It has a most powerful cancerous odour, perceptible on entering the room. Once or twice two or three "hard lumps" have come away. *Vaginal examination* painful. Cervix uteri completely destroyed, its base being occupied by an ulcerated cavity of about the size of a half-crown piece, with a hard thickened border. A portion of a hard tumour was felt lying against the left side of the rectum, and a largish hard tumour met the finger on pressing upwards and forwards at the lower

part of the vagina. She has found her pains greatly relieved by using a hip-bath as hot as she can bear it, and asked permission to continue it. She was ordered in addition two grains of opium with some soap as a suppository at night, and an occasional dose of castor oil. Two days after, suddenly applied pressure detected a solid organ, probably the uterus, extending two inches above the pubes.

The opium relieved the lancinating pains, but she once or twice suffered from diarrhœa for a day or so. This occurred on September 11th and 12th, on the former of which days she passed no urine, but on the latter hæmaturia appeared, accompanied by a return of the lancinating pain and increased difficulty of micturition. On the 13th it had much abated, and on the 15th the urine contained no blood. The blood appeared in clots at the bottom of the vessel. Still, however, after having emptied her bladder, she felt a desire to pass more urine. The diarrhœa returned on the night of the 15th, and the hæmaturia on the 17th; they appeared to alternate. On the 18th, the urine presented soft deep black clots at the bottom of the vessel. The flow of urine frequently stopped suddenly with very severe pain, and after it ceased she suffered much aching pain in the perineum. The vaginal discharge was unaltered in character. On pressing the abdomen there was much muscular resistance perceived on the left, but not on the right side. On the 19th the urine was less bloody; but a smooth uniform reddish deposit was present, consisting of blood, mucus, and pus corpuscles; its specific gravity was 1.010, and when boiled, the albumen occupied one-eighth of its bulk.

September 24th. No hæmaturia since the 19th, and she has been freer from pain than for some days previously. The urine remains very scanty, and is passed with difficulty. She has now no gripping pain around the navel, but little pain in the groin, &c., and no lancinating pain. A new appearance however is presented: the belly is fuller, but very yielding, except on the left side. There is some enlargement of the superficial veins at its lower part, especially on the right side. There is slight dulness above the pubes where there has hitherto been resonance, but no fluctuation can be detected. The urine examined on the 25th still contained a little blood. From this time the appetite improved, although she suffered somewhat from thirst, and she passed her urine more freely and more abundantly.

October 8th. On the 4th, the left leg was observed to be swollen. The swelling commenced in the groin and proceeded downwards, and now occupies the entire limb; it is greater when she sits up than while in bed. There is also aching pain in the back part of the thigh and calf. The superficial inguinal glands on the left side are enlarged and tender, but not fixed. No red lines proceeding from them, and no apparent thickening of the veins or lymphatics of the limb. On the right side, the glands are less enlarged; there is no swelling, but some small knotty veins are felt passing over Poupart's ligament, and ending opposite the saphenous opening. The urine examined on the 9th presented no blood, but a deposit consisting of pus

globules. On the 11th, the swelling of the left leg began to diminish, but that of the abdomen to increase. When visited on the 16th, she complained of general aching pains in the belly, especially on the left side, and also of a sense of tenderness on pressure above the navel, in both flanks and iliac regions, and in the left hypocondrium. She stated that ever since the hæmaturia ceased her urine had been flowing from her involuntarily, but that sometimes she could pass a little with straining, but only in drops. The vaginal discharge had lessened and become less offensive. Fluid detected in peritoneum in small quantities by dulness on percussion, and fluctuation in depending parts. The latter was difficult to ascertain, and easily destroyed by pressure. Under the use of half an ounce of cream of tartar, with a few grains of ginger every morning, this was beginning to lessen, when I was refused any further attendance on her from her husband's objecting to physical examination of the abdomen.

REMARKS.

It is doubtful at what time the uterine cancer in this case began to be developed. There is never any difficulty in recognizing it when advanced to the extent that was observed when this patient first came under my notice, but it is often not so easy to determine either from the history or from the condition of the organ, how long it may have existed. Of one thing we may be certain, however, in the instance before us, namely, that eight months before the patient presented herself at the Dispensary, the disease was not only present but advanced, since at that time she underwent one of those sudden and characteristic attacks of menorrhagia, which are so common in the course of uterine cancer that in twenty-one cases observed by Louis, only one went through its course without it.—(*Walshe on Cancer.*) I say that at that time the disease was advanced, and I judge it to have been so from the occurrence previously of difficulty in the act of defæcation, which I found was attributable to the pressure of a *secondary* cancerous growth upon the rectum. In by far the majority of instances of cancer of the womb, hæmorrhage is the first symptom which attracts attention to the organ, so insidious is the approach, and so undecided are the indications to the patient of the earlier stages of a disorder, second to none in fatality, or in the distress which accompanies its complete development. In this case, however, there had been symptoms pointing to the womb as the seat of disease, although the history does not indicate that they were distinctive of malignancy. She had suffered twice in succession within a few months from abortion, during the autumn preceding the hæmorrhage, and just prior to the latter, had been discharged from one of the London Hospitals, where she had been recognized as labouring under uterine disease. To look back still further, the earliest symptoms of any disorder of the womb manifested themselves subsequently to a labour

in which there was a partial attachment of the placenta to the os uteri, and during which the cervix had become lacerated. There continued such disease in the cervix as to demand the frequent use of cauterization. A point of interest connected with the flooding is, that the patient was not one in whom the catamenial functions were performed with any regularity, except during the sympathetic irritation which suckling gave rise to. The sudden hæmorrhage thus was the more remarkable, and the more indicative of serious disease, that it was the very opposite condition to that which was established as the habit of her system. The remaining *symptoms* of the disease were lancinating pain, vaginal discharge, sallowness of complexion, and sympathetic disorder of the stomach. The lancinating pain was perhaps not entirely due to the uterine disease, but partly to that conjoined with it in the bladder, since it was increased in severity when the other symptoms of the latter affection became more marked. The discharge at the time I saw the patient was reddish and watery, the appearance usually presented when the cancer is advanced to the stage of ulceration. It presented also that remarkable odour which requires only to be once smelt to be recollected for a life time. The result of digital examination left no doubt as to the disease under which she laboured.

In connection with the causes of the disease, we must be struck with the early age at which the catamenial discharge first appeared, with the early age at which the woman married, and the number of times she had conceived. Had these circumstances anything to do with the tendency to the affection? The case last related occurred, too, in a prostitute. Statistical enquiry has decided in the negative, and has confirmed the opinion which the experience of those who have seen most of the disease had led them to form,—namely, that sexual regularities or irregularities, frequent or unfrequent pregnancies, temperate or intemperate intercourse, numerous miscarriages, or the reverse, have nothing whatever to do with the development of the disease.

I have already alluded to hypertrophy of the uterus as a complication of cancer. In the last case it was very extensive, but here was moderate, the difference probably depending on the difference of seat in the primary disease.

Cancer of the Bladder.—Although we cannot on good evidence deny the occurrence of cancer of the bladder as a primary affection, yet it is far more common secondarily to that of other parts, and especially to cancer of the womb. It was indicated in this case both by symptoms referable to the bladder and by physical evidence in addition. The latter was the perception of a tumour in the situation of the base of the bladder, of whose nature there could be little question when it was considered in what connection it

was found. One of the most remarkable of the symptoms was the *hæmaturia*. This was evidently of vesical origin, no sign of renal disease having preceded or followed it, while it was accompanied and succeeded by other signs of irritation in the bladder. It was, in addition, sudden and severe; and there was no exciting cause distinguishable. These are just the characters which mark hæmorrhage from cancer of the bladder. The urine, however, though carefully and repeatedly examined, afforded to the microscope no appearances which would tend to have confirmed the diagnosis, no cancer cells being perceptible, and the deposits presenting only the products of hæmorrhage and of inflammation of the mucous membrane. Another symptom of the disease was the difficult micturition, due perhaps to the position of the cancerous growth and the sense of dissatisfaction which followed the completion of the act, the belief of the patient being that something yet remained in the bladder to be discharged. I need merely allude to the alternation between the uterine hæmorrhage and the diarrhœa as a matter of interest. Of all the seats of vesical cancer the base of the organ is the most ordinary part to be affected. In this point, therefore, the case before us presented nothing peculiar, but it was remarkable in the independence of the deposit of contamination by mere contact with the uterus. For the most part it is thus that the bladder becomes affected, the disease spreading from the cervix uteri to the organs and tissues in its neighbourhood, but here the deposit in the bladder was perfectly isolated, having no connection whatever with the seat of primary disease.

Cancer of the Lymphatic Glands within the Pelvis is a complication of uterine cancer by no means rare. In the present case there was no physical evidence of it in any but one situation,—namely, as constituting the tumour felt in the vaginal examination to be pressing against the left side of the rectum. It is highly probable, however, that this was merely a part of a more extensive implication of the lymphatic system in the pelvis, if we may judge by a variety of symptoms which this, conjoined with intercurrent attacks of inflammation, will suffice to explain. I refer, of course, to the symptoms localised in the neighbourhood of the groins, of the hip, thigh, and leg, especially of the left side. The pressure exerted by these glands on the branches of the anterior crural nerve and on the sciatic, will account for the pain she experienced in these situations, for the obstruction to the return of blood, as pointed out by the enlargement of the veins, while the temporary œdema of the leg may be explained by an increase of their bulk and pressure under the influence of inflammatory turgescence. The character of the swelling, too, was remarkable; it did not commence with the ankle and extend upwards to the thigh, but on the contrary, began in the groin, and spread downwards to the leg.

This puts one in mind of *phlegmatia dolens*, in which the swelling usually follows this order, and its pathology presented nothing very different from that complaint. It differed in the swelling, being distinctly influenced by changes in the position of the limb. Must not the *ascites* which had followed on the lessening of the swelling of the leg be attributed to the influence of the same local cause? Most of the cases of *ascites* we meet with in practice are due to obstruction in the venous circulation of the abdomen; but there is also an inflammatory *ascites*, the result, not only of general contamination of the blood with non-excreted matters, as in renal disease, but also arising from a more local cause of irritation. This was probably the case in the present instance.

I must allude, before closing these few pathological observations, to the resistance offered by the abdominal muscles to the hand over the left side of the abdomen; in fact, where it would have excited pressure indirectly upon the diseased organs. It is a sign never to be neglected in the determination of abdominal disease, and when presented by one part more than by another, it is a pretty certain token of disease in its neighbourhood, even when no complaint of tenderness is made by the patient.

Leamington, April 4, 1849.

TOTAL SUPPRESSION OF URINE DURING SEVEN DAYS,

TERMINATING IN RECOVERY.

By W. S. OKE, M.D., Physician to the Royal South Hants Infirmary.

Dr. Watson, in his admirable "Lectures on the Principles and Practice of Physic," states (Lecture 77,) that "this affection usually occurs in persons who are advanced in life, and inclined to corpulency." He also writes as follows:—"Sir Henry Hallford has related one of five instances of this disease that he had met with in the course of twenty-seven years; he says it was an exact copy of all the others that had fallen under his notice. As his account of the general course of the symptoms coincides with the statements of other writers, I may give you his narrative in lieu of a formal description."

"A very corpulent robust farmer, of about 55 years of age, was seized with a rigor, which induced him to send for his apothecary. He had not made water it appeared for twenty-four hours; but there was no pain, no sense of weight in the loins, no distension in any part of the abdomen, and therefore no alarm was taken till the following morning, when it was thought proper to ascertain whether there was any water in the bladder, by the introduction of a catheter, and none was found. I was then called, (says Sir Henry,) and another inquiry was made some few hours afterwards, by one of the most experienced surgeons in London, whether the bladder contained any urine or not, when

it appeared clear that there was none. The patient sat up in bed, and conversed as usual, complaining of some nausea, but of nothing material in his own view, and I remember that his friends expressed their surprise that so much importance should be attached to so little apparent illness. The patient's pulse was somewhat slower than usual; and sometimes he was heavy and oppressed. I ventured to state, (continues the author,) that if we should not succeed in making the kidneys act, the patient would soon become comatose, and would probably die the following night, for this was the course of the malady in every other instance I had seen. It happened so, he died in thirty hours after this in a state of stupefaction."

I have deemed it right to quote this case in detail, representing as it does the five fatal instances met with by the late Sir Henry Hallford, in order that the case about to be related may be compared with it, and to show that the constitution might sometimes tolerate excrementitious poison in the circulation for a much longer time, and even recover from its baneful effects.

A gentleman, 75 years of age, of short stature and spare habit of body, had, in the earlier part of his life, suffered severely at times from disordered function of the urinary organs, but for many years past he had enjoyed an exemption from his complaint by observing a more abstemious diet, and by taking alkalines, at the recommendation of an eminent London surgeon. Supposing that he had completely got rid of his complaint by this treatment, he ventured to return to his former habit of incautious living. The result was, that he became again subject to the same symptoms, and in one of these attacks, at the latter end of October last, he was attended by his medical friend, Mr. John Rushworth Keele, an experienced surgeon of this town. The symptoms became alarming, and as a total suppression of urine had taken place, I was requested by Mr. Keele to meet him in consultation on the 31st of October. It appeared that the attack was preceded by rigors, which were followed by symptoms of renal obstruction; that the warm bath, with other suitable means, had been tried; and that a common-sized catheter had been judiciously introduced, to ascertain whether any urine was retained in the bladder, but no urine was found.

When we saw the patient in consultation the following facts were noticed:—No urine had passed since the 30th; there was no distention of the pubic region; and upon another cautious and facile introduction of the catheter by Mr. Keele, the bladder was found quite empty; there was no pain nor uneasiness of the loins, along the ureters, or in the course of the spermatic nerves; neither was there any contraction of the cremaster muscles; but there was a more frequent desire to make water than is natural, and so extremely urgent was the call, that he required the vessel to be handed instantly, "lest (according to his words,) the urine should flow over the bed." Each effort was exceedingly straining and painful, as in dysuria, and caused him to cry out loudly, but the only result of his efforts was a few drops of bright blood. The system was but little disturbed; the tongue moist, and not much furred; the pulse about 90 in the minute,

and regular; the skin cool; and what was very remarkable, although he had been a person of a very irritable temper, he had now become subdued, placid, and composed.

Supposing from the patient's advanced age, that the suppression may be caused by atonicity or degeneration of the structure of the kidneys, we decided on first trying the effect of stimulant diuretics.

R. Olei Terebinthinæ purificati, guttas xv.; Tinctr. Hyosciami, m. xxv.; Aquæ Cinnamoni, oz. j. Misturæ Acaciæ, q. s., adbene miscend. Capiat hanc dosin quarta quaque hora. Fricetur subinde in lumborum regionem Linimentum Terebinthinæ.

At an evening visit, finding that there had been no action of the kidneys, the following was ordered with a repetition of the warm bath.

R. Pulveris Ipecacuanhæ Compositi, gr. iv.; Nitratis Potassæ, gr. x.; Misturæ Acaciæ, Syrupi Simplicis singulor, dr. j. Misturæ Camphoræ, oz. j. Misce pro haustu quartis horis sumendo. Capiat cras mane Olei Ricini, oz. ss.

November 1st. He has passed a tranquil night, with snatches of sleep; the bowels have been moderately acted upon; the same strainings of the bladder continue; but there has been no secretion of urine. He has been sick and has vomited.

Sumat haustum sequentem inter effervescentiam, quarta quaque hora cum granis quindecim Acidi Citrici in Aqua pauxillo diluti.

R. Sodæ Sesqui-Carbonatis, scr. j.; Liquoris Opii Sedativi Min. quinque; Spiritus Ætheris Nitrici, m. xx.; Syrupi Simplicis, dr. j.; Aquæ Destillatæ, oz. j. Misce

Vespere. He is much the same in every respect; no urine has passed. Repetatur balneum tepidum et pergat iisden medicamentis. Repetatur Olei Ricini, oz. ss., primo mane.

November 2nd. The vomiting continues, and there is the same ineffectual straining to make water, voiding only a few drops of blood. Between these distressing efforts he lies down in his bed calm and composed. The tongue is somewhat furred, and the pulse between 80 and 90 in the minute. The bowels have not responded to the castor oil. Applicentur cucurbitulæ cruentæ regioni lumbali, et injiciatur per anum enema purgans.

He was also directed to take a dose of some aperient pills, to which he had been accustomed, if the bowels should require them.

3rd. The strangury, suppression, vomiting and constipation continue as yesterday. He remains composed in the intervals of endeavouring to pass water, but there is no tendency to coma. Repetantur balneum tepidum, enema purgans, et pilulæ aperientes.

4th. The symptoms continue with but little variation; the stomach resists everything, and he is evidently weaker; not a drop of urine has been passed. The catheter is once more easily and cautiously introduced for the satisfaction of his relations; but no urine whatever was found in the bladder, and no blood followed its withdrawal.

During the 5th and 6th, he went from bad to worse. The matter evacuated by the stomach became dark and fetid; an urinous smell was perceptible in the

breath; the pulse fell; the temperature of the extremities was diminished; and his mind wandered.

On the evening of the 6th, there was no improvement in any respect; and he appeared fast approaching the moribund state.

On the morning of the 7th, I called as I supposed for the last time. Finding my colleague and one of the patient's sons with unusually cheerful faces, and enquiring the reason, I was requested to go up-stairs and satisfy myself. There, to my great astonishment, I saw that the patient had during the night passed an ordinary chamber-vessel nearly full of urine, somewhat tinged with blood; and I soon found, that instead of the subdued and placid manner exhibited during the whole time of the suppression, his natural irritability of temper had returned; for upon congratulating him upon so great a change for the best, he sharply and pettishly exclaimed,—“Better, Sir, Better! how can that be possible, when it must be evident that I am sinking into the grave every moment!”

In this, however, he was mistaken, as the kidneys continued to act, the vomiting subsided, the bowels resumed their functions, and under the care and attention of Mr. Keele, he gradually recovered as good a state of health as so formidable a malady at his advanced age could allow us to expect.

He still occasionally suffers from dysuria; but there has been no return of the ischuria renalis, although it is probable the latter might again take place.

I shall not go into the question of the proximate cause of the renal obstruction, as such an enquiry would be merely hypothetical and inconclusive; neither shall I allude to the treatment as having been successful, as the removal of the suppression cannot fairly be attributed to any of the means employed. I have stated the case (very briefly) to shew that we are not always to despair of recovery where the suppression of the urinary secretion is total, and where the cerebral functions might be exposed to the full action of an excrementitious poison during seven days. If the suppression had not been complete,—even if a few ounces of urine had been secreted in the seven days, I should not have deemed the case worthy of being recorded. Doubtless many of my professional brethren could adduce instances of urinary suppression, and perhaps with the like result; nevertheless, I believe such instances to be of uncommon occurrence.

It is singular that under circumstances so favourable to its production there should have been no comatose condition of the brain, for, although the mind occasionally wandered on the sixth and seventh day of the ischuria, there certainly was no coma; it is, however, probable, that the subdued and composed state of the nervous system was the incipient sedative effect of the urinous poison circulating in the blood, and that, had it been longer retained, a fatal coma would have been the result. This opinion is strengthened by the fact, that with the restoration of the renal function, the composed state of the patient was at an end, and all his former moral irritability returned.

Southampton, February 22, 1849.

ON ABSCESES OF THE PELVIS UNCONNECTED WITH PARTURITION.

By JOHN S. BARTRUM, F.R.C.S., Surgeon to the
Eastern Dispensary, Bath.

(Read at the Quarterly Meeting of the Bath and Bristol
Branch Association, March 22, 1849.)

The cases to which I wish to draw attention are—pelvic abscesses, not connected with parturition, which, not being of every-day occurrence, nor, on the other hand, presenting any very marked peculiarities, are yet of sufficient importance to receive special notice, particularly as they often cause the patient prolonged anxiety, and in their earlier stages present difficulties in diagnosis which the issue of the cases only solves. Moreover, they well illustrate how much the powers of nature will effect towards cure without receiving any more surgical aid (though that, indeed, is much) than is derived from general and constitutional remedies, without any treatment being applied to the parts at first attacked.

My attention was first drawn to diseases of this class in 1838, while acting as clinical clerk to Dr. Watson, at the Middlesex Hospital, when two cases of inflammation of the pelvic peritoneum came under my observation. Not being under the care of Dr. Watson, I did not take notes of them, but well remember that in one case there was found a large accumulation of purulent matter in the pelvis, while the abdominal peritoneum was unaffected. The other case, I believe, recovered.

CASE I.

The case which first came under my own care and notice was in a lady, single, aged about 30, of the most active temperate habits, who for two or three months had suffered from depression, languor, and a dull pain in the head and loins.

On March 30, 1842, she was attacked with pain in the bowels and groin, with a feeling of weight in the right lumbar region, extending to the pubes, which being accompanied by sickness, and the excretion of gravel was ascribed to the passage of the gravel down the ureter. On the second day there was tenderness and obvious fulness in the right iliac and hypogastric regions; the spinal column was nowhere tender. There was at first some sense of prolapsus, and continued pain in passing a motion, and bearing down in the rectum. Prior to this attack, and at each recurrence of the subsequent minor attacks, there was pain in the bladder, and partial stoppage of the urine. She continued in a weak feverish condition for a fortnight, when, while sitting at table, there escaped from the vagina a large quantity of offensive purulent matter, mixed with flakes of lymph; this discharge continued for several weeks. She had not suffered from habitual constipation. In this convalescent state she came under my care, still complaining of pain in the right iliac and inguinal regions, the

discharge being much less, and her other symptoms much improving.

After several slight subsequent attacks, she wholly recovered her health, and is now quite strong and vigorous. The treatment consisted of warm baths, opiates, effervescent salines, and absolute rest.

CASE II.

This case is one of very simple character, it having arisen from exposure to cold, and was not seated deeply within the pelvis.

November, 1845. E. D., aged 32, married, but never pregnant, having wetted her feet shortly after menstruation, was attacked with shivering and feverishness, and after some days was unable to sit down, or to pass her motions without much discomfort; her bladder was not affected. When called to her a fortnight after the preceding symptoms had first been felt, I found on examination, a large soft swelling high up, and on the left side of the vagina, between it and the rectum. In the course of ten days the swelling much increased, and when opened, a large quantity of healthy pus was let out. The patient shortly recovered, and has not felt any further inconvenience than some pain in the same region on every change of weather.

CASE III.

This case in its early stage appeared more complex, the collection of pus having caused complete retroversion of the uterus; her recovery was, however, complete and rapid.

E. F., aged 30, mother of three children, and suckling one six months old. Her labour had been perfectly natural, since when, till two months ago, she had nothing to complain of. About that time she began to find some difficulty in making water; she had no pain in the groin or abdomen, but had suffered much from a heavy pain across the sacrum.

October 20th, 1845. She applied to me on account of the utter inability to relieve her bladder. She had not passed any urine for thirty-six hours, and was necessarily much distressed. On passing the flexible catheter, the existence of some impediment external to the urethra was ascertained, and on examination I found the uterus completely retroverted, its fundus being thrown back on the rectum, while the cervix pressed on the urethra. For three days I used the catheter, and acted gently on the bowels by castor oil, intending to replace the womb, when, to my surprise, I learnt that on the fourth morning a large quantity of pus had been voided by the rectum, and found that the uterus had resumed its natural position. Her recovery was rapid. She has since had two children, without any further inconvenience.

CASE IV.

This case is one which, in its early stages, was very severe, and its diagnosis quite obscure.

A. H., aged 27, married; two children, youngest a year and ten months old.

July, 1845. Complained of pain and irritation in the rectum, simulating piles. The pain and difficulty in defæcation increased, and was not relieved by

laxatives or enemas; there was also a discharge of "whites," with much pain on connubial intercourse.

September 1st. Had an attack of shivering, with headache; bowels confined, but when they were acted on there was severe pain in the lower part of the abdomen. The next day, without any sufficient reason, they became excessively relaxed,—so much so that on the slightest exertion some fæcal matter passed away. In this state she continued for several days, the pain being increased by taking liquids.

4th. There had set in unequivocal symptoms of acute inflammation of the lower part of the abdomen; she was very tender in each groin, and below the navel, not being able to bear the weight of the clothes; there was no vomiting; pulse very small. The amount of pain, tension, and tenderness, varied for several days, but she gradually improved under active treatment. The result was, that after some days there was found, in the right inguinal and iliac regions, a large lump, extending from the crest of the ilium to the groin. This lasted for about a fortnight.

20th. As she sat up in bed, an urgent desire to relieve herself came on, when she voided from the rectum a large quantity of purulent matter, the inguinal tumour at the same time subsiding and becoming less tender. After the lapse of some days there was no trace of the swelling; there was no further discharge of pus. The leucorrhœa and feeling of prolapsus, with difficult micturition, also gradually passed off.

April, 1847. She had a slight return of pain in the sacrum, which one cupping, with the hot hip-bath, removed; since then she had neither piles nor prolapsus uteri; has not been pregnant till recently, being now (March, 1849) just out of her confinement with a fine healthy child. The labour had no peculiarities. The treatment during her illness was vigorous; she was twice bled; leeches were applied several times; blue pill and opium were administered, and poultices applied to the hypogastrium.

CASE V.

The case I am about to relate is much more chronic in its present stage, but at an earlier period probably presented features of acute activity somewhat similar to the last.

A. F., aged 35, has had two children, the youngest twelve years old, since the birth of which she has not been pregnant.

July, 1848. She states that seven years ago she had inflammation of the bladder, with excessive pain in the hypogastrium, and continual desire to micturate, which gave her much pain. For this she was admitted into the Bristol Infirmary, where she was for some weeks, and was freely leeches, she then requiring the use of the catheter. Since she recovered from that attack she had perfect power over her bladder, and has been able to attend to her usual domestic duties, and has not suffered from menorrhagia.

Ten weeks ago, after having been wetted in the feet and legs while carrying a child, she suddenly found a thick, yellowish, white, (apparently purulent,) discharge from the vagina, accompanied by a sense of prolapsus.

Three days afterwards, at her proper time, menstruation began, and continued for ten days. From that time she has never been free of discharge to a greater or less extent; when the discharge is not coloured, it is thick, yellow, with a constant feeling of bearing down, and desire to micturate, which feelings are much increased by walking or standing. If she is not able to relieve her bladder, it causes additional suffering; the passing the water gives rise to a cutting pain. The urine is said to have been high coloured, with a thick sediment; the bowels have been confined. She states that before and after each motion she suffers much pain, with a sense of scalding and cutting up the sacrum. The motions are reported to be streaked with blood and matter. She is never free from pain across the sacrum and hips, especially on the right side. Deep in the right iliac and hypogastric region she is very tender, and that part is fuller than on the opposite side, though no circumscribed tumour can be felt.

On examination, neither the vulva nor cervix uteri were found tender, nor the vagina, except at the upper part of the recto-vaginal septum, which at one part feels fuller and bulging, and is quite tender. The os uteri feels natural; the uterus is not enlarged, nor tender, and is quite moveable.

March, 1849. During the last six months her state has varied, though on the whole she has materially improved; indeed she has now regained the hue of health, and is able again to attend to her family duties. She has had several minor attacks, attended by throbbing in the vagina, slight shivering, and flushes of heat. On one occasion (December, 1848,) she suffered from sharp pains in the groin, after which there was an abundant thick yellow discharge from the vagina, with much relief to the groin, the feeling being described as if something had given way. Not long afterwards, when the discharge had nearly ceased for some time, on passing a motion, there was a sharp pain on the right side of the sacrum, the motions being very dark and mingled with white matter; micturition was difficult, as though there was something in the way, with pain over the pubes. Passing the catheter gave her much pain.

The treatment has consisted of very gentle mercurials, combined with tonics; the sixteenth of a grain of oxymuriate of mercury, in tincture of cinchona, twice a day, by which her gums were slightly affected, and were kept just tender for some time, with marked benefit. This was followed by three-grain doses of iodide of potassium twice a day. Local counter-irritation was an important part of the treatment; blisters applied over the inguinal region gave very great relief. There is every probability of her now getting quite well.

The question that naturally arises from the consideration of such cases as these is,—what is the original disease? To me they appear to have been phlegmonous abscesses in the cellular substance of the pelvis, internal, in all the cases, to the pelvic fascia, for neither in these, nor in any of the subsequent ones (unless connected with cancerous degeneration, which will eat its way through any tissue,) was there a trace of irritation of the nerves of the lower extremity. What they most resemble are the cases of abscess

connected with the cæcal appendix; from this disease they differ in the inflammatory action being more deeply seated, and their affecting the pelvic viscera only, the bowels appearing to have been affected only secondarily, when the abscesses burst into the rectum, which consequently became excoriated. In neither of them was there any symptom leading to the belief that the bones of the pelvis were implicated, nor did they arise from the excitement of parturition, but, probably, from the high vascularity and excitable character of the pelvic viscera in the female, especially during the period of menstruation, when the exposure of the feet or legs to wet or cold will readily excite disorder.

In men the same exciting cause would probably give rise to deeply-seated abscesses connected with the rectum and forming eventually a most troublesome fistula. To this general rule, I shall, however, presently narrate a well-marked exception.

There is a class of cases presenting all the features of inflammation of the brain occurring in middle life previous to the cessation of the menses, which cases are closely allied to these of abscess. The symptoms presented by the two most marked cases that I have seen, in neither of which had pregnancy occurred for several years, were excessive menstrual discharge, with the sense of prolapsus of both uterus and rectum, increased by standing and defæcation, accompanied by a fixed aching pain, with much tenderness deep in the pelvis in the situation of one or other ovary; there was a feeling of tumefaction in each of the cases, but I could not detect any swelling. This pain continued for some weeks and gradually passed off, though at the menstrual periods they have felt some return of the uneasiness. In a lesser degree the same symptoms occasionally present themselves after marriage or when the uterus has been injected, a proceeding to be *scrupulously avoided* except under circumstances of urgent necessity.

I have not yet found abscess of the pelvis connected with ulceration of the cervix uteri, nor from the nature of that complaint could such a combination be anticipated. The following case *may be* one of this kind, of which, however, though it has been under my observation for years, and occupied my best attention, I am by no means certain; its early stage I have no doubt was ulceration of the cervix uteri in a woman of highly nervous temperament, which disease induced frequent abortion.

CASE VI.

E. H., aged 39, has had ten children born alive, the last five years ago. Her mother died of disease of the womb. In September, 1839, she states that she was attended by a nurse, with twins of about seven months, which lived some hours. After the birth of the first the woman pulled away the placenta, after which the second child was born; from this she gradually recovered. In January, 1840, after unusual exertion she had pain in the hips and back, with occasional discharges of blood. About this time I find her down in my Dispensary book as suffering from metritis. I then knew nothing about ulceration of the cervix. In September, 1840, she aborted at eight months, after

which for some time she suffered from menorrhagia, with constant sense of prolapsus and excessive tenderness of the vagina, and she aborted several times. In January, 1844, she had a living child of about eight months, when she states the placenta was with difficulty removed; the child lived three months, she having no milk. In 1845 she again aborted, not being aware that she was pregnant. Twelve months ago she had quite recovered her health, though not so strong as originally; menstruation being natural and not profuse.

For the last six months she has been losing ground, catamenia have not appeared, but twice she has had a large amount of thick yellow discharge, and occasionally blood in the urine. For the last six weeks, (December 23, 1848,) she has perceived none in it. Throughout her long illness she has suffered from frequent attacks of vomiting, with red glazed tongue and occasional diarrhoea.

Her state in December 1848, was the following:—She complains of pain across the sacrum, hips, and pubes, down the inside of both thighs, especially in the left groin, to the inside of the left foot and ankle; has flitting pain in other parts; has pain in passing a motion; if the bowels are ever so relaxed, she is still obliged to strain with much pain in the anus and sacrum; if the motion is solid and formed it is said to be covered with mucus and slime. Occasionally she need not for a long time relieve her bladder, at other times she must frequently do so; the making water is almost always accompanied by pain above the pubes and through the passage. At uncertain intervals she passes abundantly a thin slightly-coloured discharge, making her linen stiff, starchy, and rusty coloured; this occasionally comes on in gushes without previous notice. She has also a thick yellow discharge streaked with blood, or containing amongst it small clots of blood. She has no bearing down except in the rectum. She is very tender in the left groin and towards the hip. She states that occasionally there is a large oblong swelling in the left groin, which is as apparent when lying down as when sitting up. On vaginal examination I found the uterus enlarged, not fixed, the cervix short and fissured; on the left side it feels knotty as though the veins were enlarged and varicose. The upper boundary of the vagina at that portion of the pelvis corresponding to the left groin is peculiarly tender, no other parts of the canal being so, and nothing special can be detected on the vesical surface. The secretion left on the finger is not unnatural.

In this, as well as the other cases, I have carelessly overlooked the means of diagnosis afforded by examination by the rectum, so that I cannot with confidence quote this case as one of the class I am endeavouring to illustrate, the symptoms during the last six months leading to the fear that cancerous degeneration has arisen in connection with long standing uterine disease.

Abscesses in this region are not confined to the female sex, though in the male they rarely discharge themselves by the natural passages, as in the female, but in the neighbourhood of the rectum, constituting the various forms of fistula ani. The probable reason of this difference is, that in these latter cases the

abscesses are external to the inferior layer of the pelvic fascia, while those internal to the pelvic fascia open into the rectum.

CASE VII.

To Mr. T. Barrett I was indebted for seeing a well-marked case in the male, originating apparently in inflammation of the cellular substance around or posterior to the prostate gland, thence spreading upwards, and secondarily involving the peritoneum, especially its pelvic portion. He kindly furnished me with the following history:—

J. B., aged 16, a thin weakly youth, had been labouring for two or three days, early in April, 1846, under a feverish attack. He then had severe pain in the bowels particularly over the pubes, increased on pressure; the bowels were costive and he had not passed any water for twenty hours. There being some difficulty, at the request of Mr. Barrett, I passed the catheter and drew off about three pints of urine. There was no pain or tension of the perineum. For some days the pain in the bowels and fever continued, and the catheter was passed daily. After a short time he was able to return to his employment, but in about ten days he was again laid up. He had then great and continued pain, much increased on pressure, over the whole of the bowels, but mostly over the right iliac region; he lay on his back with the right leg drawn up and had frequent rigors; he was then labouring under peritonitis. The treatment extended over about a week.

He was about again to return to his employment when ascites set in; this was, however, quickly relieved by mercurial frictions, the pain never having entirely left the right iliac region, that part being very painful on pressure, and there was always numbness down the right leg to the knee. His appetite failed him and he lost flesh daily.

One morning (about four weeks from the first attack) Mr. Barrett was sent for to him in haste. He found him on the night stool very faint and voiding a large quantity from the rectum of very offensive purulent matter unmixed with feces. He had been suddenly seized with desire to pass a motion, and before he could reach the night stool an immense quantity of purulent matter "gushed," as he expressed it, from his bowels. The quantity collected on the bed and in the pan was about three pints and a half. He continued to pass pus for about a week, in quantities varying from four to ten ounces daily, when it suddenly ceased and he recovered his health and resumed his duties.

The pain in the iliac region had been very acute the day before the abscess burst, but he lost it directly the discharge took place.

The patient continued in pretty good health for about ten months, when he had epileptic fits and became imbecile. Since then he has died of phthisis.

Post-mortem examination. April 20th, 1849.—On examining his body there was found a large quantity of fluid within and beneath the arachnoid. The upper parts of both lungs were broken down. In the abdomen there were no traces of general peritonitis, but over

the fundus of the bladder was a corrugated spot the size of a crown piece, and of a dead white colour, continuous with the layer lying on the rectum. The limits of this were almost abrupt; this consisted of the peritoneum much thickened, by the addition of dense cellular tissue on its attached side, the coats of the bladder at this part being correspondingly thickened, so that a section was upwards of a quarter of an inch in thickness; the bladder itself with this exception was healthy. The surrounding peritoneum appears quite healthy, the bladder not being tied down by adhesions, except at the part named. Just above the fundus of the bladder is a fibrous cord, the thickness of a quill, extending from the upper part of the rectum to a portion of the lower ilium, to which it is tied by a broad band of cellular tissue, the upper boundary of which is the above-named fibrous band; on opening the rectum this band had evidently been connected with it, there being a depression on the mucous surface, and a probe could be passed into it; the tissue of this band was much more intimately connected with that of the rectum than with the ilium, which did not present any appearance of an aperture that had closed up. About six inches up the rectum, opposite the thickened peritoneum and fundus of the bladder, were the traces of the abscess, the tissues at one part being hard, and intimately connected with the structure of the gut. The impression, an accurate examination of the pelvic viscera gave me was, that the inflammation had originated in the cellular tissue of the fundus of the bladder, not the prostatic portion as I had supposed, causing its loss of power, and this ended in the formation of an abscess posterior to the fundus, which, having attained a large size, and formed adhesions to the intestine, burst into the rectum. I do not know whether there was any connection with the fibrous band before described, or whether it was not one of those diverticula that occasionally are found attached to the intestines. The mesenteric glands were enlarged, but there was no tubercular deposit.

Through the courtesy of Mr. Findlater Crang, I was enabled to make a *post-mortem* examination of a case of the disease under consideration. Her history, as far as could be gathered, was as follows:—

CASE VIII.

M. A., aged 32, never having borne children, about ten years ago was supposed to have suffered from inflammation of the bowels, when she appeared to be going into a decline; she then much improved in health, and two years and a half ago she married. Four months before her death she supposed herself pregnant, from her increase of size and the severe pain she occasionally suffered in her bowels. About a month before her death she felt a sensation as if something had burst internally, which she likened to the explosion of a pistol; after this there was frequent vomiting, the bowels being then costive. She was not under medical treatment at this time, Mr. Crang being called to her only just previous to her death, February 4th, 1849. On examination the broad ligament on the left side of the uterus was enlarged, puckered, closely matted

together, and adherent to the upper part of the rectum. The left ovary, and the parts immediately around it, formed a large bag of purulent matter, which had opened itself by a round aperture, with smooth defined margins, about twelve inches up the rectum, which gut was deeply injected, and its mucous surface ulcerated in some spots. The uterus was not enlarged, and, with the vagina, bladder, and lungs, were healthy. There were no traces of cancerous or tubercular disease.

The last case which I shall narrate is one for the history of which I am indebted to Dr. Davies, by whose courtesy I was present at the *post-mortem* examination. My object in now quoting it is to show the strong contrast it presents in the severity and urgency of its symptoms to the cases of idiopathic abscess of the pelvis I have thus imperfectly drawn up.

CASE IX.

Elizabeth Chapman, aged 40, the mother of four children, had led a somewhat irregular life; first came under Dr. Davies's observation in the summer of last year. Her health appears to have been good up to the period of her last confinement, which took place three months before he saw her; the labour was a difficult one, and had to be terminated by means of instruments. She stated that sometime after her confinement, when the ordinary discharge should have terminated, there was set up a thin watery discharge, very offensive, mixed for some time with shreds of membranous matter, like soaked brown paper. The shreddy matter had ceased before he saw her, at which time her condition was the following:—Countenance pinched and anxious; much emaciated; skin soft and blanched; bowels irregular, at times relaxed at others much confined; pulse quick and weak; some degree of hectic fever; a thin, watery, offensive discharge from the vagina; examination showed great destruction of the vaginal walls; the uterus appeared of its normal size, the mouth being somewhat open, and the lips everted. She remained in the hospital about two months, when she was discharged at her own desire, being anxious to return to her family. Her general symptoms at this time were considerably improved. Dr. Davies now lost sight of her for about three months, when she again applied for admission into the hospital. In addition to her other ailments she had now a thick purulent discharge from the rectum. She lingered in the Hospital for about two months, when she died, worn out with suffering, and hectic. She suffered much from tenesmus, the pain of voiding her fæces being intense. She also suffered severely from neuralgic pains down the left thigh.

On dissection the body presented a state of extreme emaciation. The arch of the pubes was removed, and the whole of the pelvic viscera taken out. On examining the mass the rectum was found ulcerated and cancerous. In the cellular tissue, to the left side of the rectum, there was a large abscess, involving the sciatic nerves of that side, and which was ready to burst through the skin on the lower edge of the glutans, and communicated with the rectum by means of three ulcerated openings, one as large as a horse-bean, the other two smaller; the edges of the ulcers were thick

and rounded. On slitting the rectum open the whole internal surface was found ulcerated; examination by means of the microscope showed the diseased mass to consist chiefly of fibrous tissue, with a large number of compound cellular bodies, considered to characterize malignant growths. There were, also, numerous exudation globules. The vagina presented a shapeless cavity, nothing of the natural walls being discovered, except just at the upper part. The uterus presented a natural appearance externally, its internal surface was in a state of ulceration. The left ovary was enlarged and lobulated.

To those desirous to investigate this subject I would recommend the perusal of some interesting cases, well described by Mr. Bell, in the 36th and 37th Volumes of the *Medical Gazette*, in which essay will be found references to most of the modern writers on this disease: for my own part I have aimed only to describe such leading features of the cases as may fully identify them, and to draw the attention of the members of the Association to the existence of such maladies, which are more common than they are supposed to be, and which not unfrequently present symptoms of a very anomalous character otherwise inexplicable.

WHOLESALE POISONING BY THE ACETATE OF LEAD.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I beg to enclose you the accompanying report of cases treated by Mr. Freer and myself, conceiving it will contain matter of interest to the profession.

I have the honour to be, Sir,

Faithfully yours,

THOMAS BANCKS.

Stourbridge, April 21, 1849.

As only some slight notice has appeared in the public prints relative to the late unfortunate cases of lead poisoning in this town and neighbourhood, and from the number of persons attacked and serious character of their symptoms, great interest has been necessarily excited, we deem it of sufficient importance to lay before the profession a few remarks on the subject, more particularly as we find no opportunity has ever before occurred to the eminent authors on medical jurisprudence and toxicology of recording the progress and treatment of so many cases at the same time.

It appears that, from the mistake of a servant employed by a miller in the neighbourhood, from twenty-five to thirty pounds of acetate of lead became mixed with about eighty sacks of flour, and were distributed to the various shops. The persons who partook of the flour, after a few days, complained of a sense of constriction about the epigastrium and throat, with violent crampy pains round the umbilicus, and

much rigidity of the abdominal muscles, a dragging pain in the lumbar region, (this latter was an invariable symptom,) and the lower extremities either cramped or partially paralysed; there was obstinate constipation, and the secretion of the kidneys scanty, and of a deep red colour; the pulse generally was slow and feeble; the countenance anxious and sunken, frequently of a peculiar livid hue; tongue flabby; gums with the characteristic blue line, and where carious teeth existed, the interior of the mouth blackened by the action of sulphuret of lead. The secretion of the skin was, in most cases, checked, and there was little development of animal heat over the surface of the body. Sickness was by no means an invariable or continued symptom, being described by the patients as having existed at first, but in many instances had subsided before medical aid was obtained. The functions of the sensorium remained undisturbed. In the more aggravated cases there was great prostration and collapse, with livid countenance and universal cramps, and numbness and other symptoms sufficiently alarming to call for the exhibition of the most powerful stimulants.

Treatment.—In most cases, from the length of time the poison had been in the system, much benefit could not be expected from the use of the stomach-pump or emetics. We found the continued use of the sulphates of soda and magnesia, largely diluted, most useful. The regular administration of enemata of gruel, with castor oil and turpentine, and where violent pain or cramps existed, in combination with opium. Enemata also, containing the sulphates and common salt, and the greater the quantity the bowels were able to retain, the more speedy the relief. The external application of turpentine, with flannels, and where sickness, (which was not frequent,) a mixture, containing hydrocyanic acid, hyosciamus, and camphor, was given with marked good effect; but we cannot too strongly dwell on the benefit derived from the *continued* exhibition of purgative medicines, the bowels being locked for a single day, was sufficient to produce a relapse. Milk, as an article of diet, was decidedly beneficial in all cases which came under our observation. Some of the slighter cases appeared to vary little from day to day, and to improve very slowly under treatment, the poisonous effects of the lead exerting its influence in keeping down the heart's action, depressing the nervous system, and partially arresting all the secretions. This state was more marked where previous disease of the heart or pulmonary vessels existed. In very many instances, after apparent convalescence for several days, all the symptoms returned in the same aggravated form, without any obvious cause, and up to the present time most of the persons who partook of the flour present a peculiarly pale, unhealthy appearance, but in no instance which came under our observation did inflammatory action ensue; and what is more strange, considering the number attacked in this town and neighbourhood, (upwards of 500,) and the violence of the symptoms of so many, not a single fatal case occurred.

It is impossible to conjecture the quantity taken by each person, it being very unequally mixed; and

several samples of flour and bread brought for analysis presented no trace of lead, whilst others were strongly impregnated with it. The secondary symptoms,—viz., paralysis, &c., &c., from which no doubt many will suffer for a considerable period of time, shall be laid before the profession in due course, together with the treatment which may be found most beneficial.

Hospital Reports.

WEST NORFOLK AND LYNN HOSPITAL.

COMPLICATED SURGICAL CASES UNDER THE CARE OF CHARLES COTTON, M.D., F.R.C.S., &c.

CONGENITAL CARCINOMATOUS TUMOUR: EXTIRPATION AT EIGHTH WEEK: SUBSEQUENT REPRODUCTION, AND DEATH.

William Howard, aged two months, a fat, plump, but rather pallid-looking infant, admitted, together with the mother, November 21st, 1846.

At birth, a lump as large as a walnut was observed on the inner side of the left arm. This had continued to increase rapidly to its present size. On examination a dense, elastic, moveable, irregularly-shaped tumour was found above the bend of the elbow, measuring seven inches in circumference, the surface of which, at a point below the centre, was of a reddish livid colour, but the handling of the swelling caused no apparent discomfort. The mother, though delicate, enjoys pretty good health. The father was reported as being subject to eruptions, but on being requested to present himself, they were ascertained to be only of a trifling scorbutic character.

November 25th. In the absence of any detectable axillary or other glandular enlargement, it was thought right, in consultation, to give the child the chance of an operation. The removal was accordingly at once proceeded with, and quickly effected, by an incision in the mesial line, directly down upon the tumour, commencing and terminating at a short distance above and below it. The integumentary and fleshy connections were then steadily detached by means of the scalpel and finger, and a further strong unyielding fascial-like attachment at the base of the tumour, divided by cutting close to the bone. Two ligatures were applied to the spouting vessels, and not more than two table-spoonful of blood escaped during the operation, at the conclusion of which the countenance became extremely pallid, respiration and circulation faint, and a state of death-like exhaustion ensued; but by being kept in the recumbent position, and carried quickly into the cool air, and by the use of other simple measures, the child shortly revived, and on being placed in bed was, after a few minutes, enabled to be refreshed by small portions of milk dropped into its mouth from the breast of the mother. The edges of the wound were suffered to fall together, surrounded by a bandage. One drop of Battley's sedative in syrup to be given if restless or uneasy.

26th. The child slept soundly from the effects of one dose of the sedative, and excepting being pale, appears no worse from the operation.

27th. Bandage, previously moistened, removed. Water dressing.

December 5th. Had gone on well; the central part of the wound soundly healed; the extremities suppurating, and kindly granulating. Ordered to take the following mixture, and to be an out-patient.

R. Liquoris Potassæ, m. xx.; Magnes. Calcinat., gr. x.; Tinct. Opii, m. iv.; Syr. Aurant. dr. iv.; Aquæ Carni ad oz. ij. M. Sumat, cohl. parvum ter in die.

January 30th, 1847. Child thriving and healthy; wound quite healed several days since. Go on with the mixture.

March 3rd. The patient privately seen; malignity of tumour settled. A small indurated secondary formation beginning at the lower end of the cicatrix. Mother directed to attend again at the Hospital.

10th. Consultation, owing to the healthy appearance and condition of the child, rather in favour of operative procedure. The mother giving but an unwilling consent from a negative hope of cure held out to her, further surgical interference was withheld.

R. Sumat Iodidi Potassii, gr. j., cum sing. dos, Mist. To remain an out-patient.

June 22. An additional tumour rapidly formed, involving the upper part of the scar, numerous blood-vessels ramify over its surface, the integuments are of a purplish colour, and the whole forms an irregularly-shaped mass exceeding the size of an orange. Child still fat and plump, though pale, and seems in no way inconvenienced by the disease.

Shortly after this report, the integuments gave way and a bleeding fungus sprouted forth, the hæmorrhage from which was occasionally and temporarily restrained by matico or alum. The child soon became sallow and cachectic, and rapidly emaciated, and owing to his living a distance from the Hospital was lost sight of up to the period of his death, (Sept. 5th,) when the mother presented herself to return thanks, and stated that her infant had died, "worn out" and exhausted by the bleeding and disease, in the twelfth month of its age and upwards of nine months after the operation.

The congenital origin, nature, and rapid growth of the tumour up to the second month, together with the hazard arising out of an operation upon a child so young, and the subsequent recurrence of the disease, excited considerable interest in this case.

Looked upon as an evidence of general constitutional vitiation, the removal of the tumour was not undertaken without great apprehension of local or other distant reproduction, and it was only in the absence for several weeks, of any manifestation of return, that hopes began to be entertained of the disease being of a more innocuous character than was anticipated, when the *new formation* was observed in the course of the cicatrix, and led to the question of further ablation or amputation, and the determination (under such unpromising circumstances, and in deference to the mother's wishes,) to leave it undisturbed. The progress and termination of the case affords an additional instance of the common and surely deadly effects of the cancerous molecule, wherever deposited, and whatever be the age of the victim, and also accords with the lamentably unsatisfactory experience of many surgeons, who, in the course of operative practice have extirpated cancerous tumours in their several stages of development, and who, but for the uncertainty of diagnosis,

look with faint hope for lasting restoration and extermination, from the ablation of true scirrhus or encephaloid formations.

Previous to the re-appearance, and whilst a doubt of the positive nature of the disease existed, *the tumour*, suspended in spirit, was forwarded to London for microscopical inspection. It presented an irregularly lobulated appearance, and on a section being made,

was found of a firm sarcomatous structure, having several rounded slightly softened vascular patches, of a livid red colour, "*simulating early fungus hæmatodes.*" By some unintentional negligence, so desirable an analysis was not obtained, neither was the preparation exhibited at the Pathological Society, as promised, nor has it up to the present time been returned to the hospital.

PROVINCIAL
Medical & Surgical Journal.

WEDNESDAY, MAY 16, 1849.

THE painful task devolves upon us, as a Committee of the Worcester Council, to communicate to our readers the melancholy intelligence that the respected Editor of this Journal has written his last line in the service of the Association.

Dr. Streeten had been suffering for some months from a bronchial affection, the consequence of an attack of influenza which seized him in the early part of the month of January. This left him in a very weak state of health, for which he was induced to try the air of Torquay; here, however, a new train of symptoms supervened, implicating the alimentary canal. For some days he was distressed with continual vomiting, which seemed to relieve the bronchial symptoms, but never entirely left him, and he gradually lost flesh and strength up to the day of his decease, which took place on Thursday evening last.

The occurrence of his death so near the day of publication precludes our giving that detailed notice of his able, untiring, and indeed invaluable services in aid of our Association, which we hope to do in a future number; we must, therefore, content ourselves with the simple announcement, that in consequence of his serious illness, the Worcester Council at their last meeting, appointed a Committee to discharge those duties previously intrusted to him. These we will endeavour to perform until the Annual Meeting, if not so ably as by our late and lamented Associate, yet we trust to the satisfaction of the members of the Association, when they take into consideration the melancholy circumstances of the case.

CHOLERA has within the last few months visited us for the second time, and for the second time is now on the eve of abandoning our shores. It may be useful therefore to enquire, how far this renewed invasion of the disease has enlightened us as to its nature, and whether we have attained to any improved method of treating it? If the number of publications which have appeared since its introduction were to be received as a criterion of the progress made in its investigation, then surely must cholera be unravelled even to its inmost mysteries, for never we should imagine, has there been known a more generally diffused spirit of authorship than this very subject has evoked. The grey-headed nestors of the profession, the mature and still active-minded physician, and the ambitious tyro, have all and each contributed their quota of print. Sundry musty tomes, snatched from the inglorious dust of the printers' shelves, where they had lain in neglected solitude since the date of the last epidemic, have again struggled into notice on the strength of a new covering or a new title page. Additional volumes have also appeared in abundance, and pamphlets and papers without end swell the amount of choleraic literature. But, we again ask, are we from this deluge of writing one whit better acquainted with the nature and treatment of the pestilence than we were in 1832. Our impartial review of what has been advanced, compels us to reply in the negative. Take any given number of the more recent communications, and do we not find the same discrepancy of opinion, as to the nature of cholera, as existed during the previous outbreak? We find now, as then, one writer safely enough contending that it is a disease of the blood; another likens it to the cold stage of fever; a third calls it inflammation of the semilunar ganglia; a fourth a perverted condition of the natural galvanic action of the human body. Even on the subject of its transmission and propagation, which needs only careful enquiry for its solution, there is no nearer approach to unanimity. One section of writers

see ample evidence of contagion, where another can discover nothing but atmospheric influence. A third party, of no small importance in this realm, with a marvellous confusion of ideas, decide that it is not contagious, but think it requisite to throw the most serious impediments in the way of commerce, with the express object of preventing communication between the healthy and infected. And then, as regards treatment, how painfully bewildering is the difference of opinion! We have calomel in scruple doses, and calomel in one-grain doses; calomel without opium and with opium; we have acetate of lead and croton oil; cold water *ad libitum* and total privation of drink; bleeding and transfusion of blood; hot baths and cold affusion; naphtha, chloroform, tartar emetic; in fact, there is scarcely an ingredient in the Pharmacopœia, but has found some advocate on the strength of one or two successful cases.

This glaring inconsistency among those who have taken upon themselves to enlighten us on the subject of cholera, is not less unfortunate for medical science, than it is discreditable to the logical reputation of its professors; and gives but too good cause for the enemies of legitimate medicine to blaspheme. The difference of opinion is doubtless to be referred to the intricacy of the subject, but of this the public mind takes no account; we have lost so much of the "divinity which did hedge round" a doctor; and both the art we practise and those who practise it, have become of late so vulgarized, that little is required to elicit the stale joke of "doctor's differences," or the more refined sarcasm of the "uncertainty of medicine." It would be well if those who write on any great question of public interest, such as cholera, would consider how unfavourable to their calling, on the public mind, is the enunciation of a series of crude speculations, (which must necessarily lead to as many varieties of opinion and conduct as there are writers,) and would not allow the passion for individual notoriety to swamp their love and reverence for the profession itself, every insult to which they should feel as a personal injury.

In these criticisms upon the recent writings on cholera, we purposely avoid distinct allusions to particular authors. Many of these writings bear evidence of being the production of cultivated and thoughtful minds, and are composed in the spirit of honest enquiry; but others, it is too plainly observed, have been put forth

with less commendable motives. On the whole, the profession has reason to be disappointed in the amount of useful information, which has been elicited by the experience afforded on the recent pestilential visitation. It found us ignorant of its natural history and treatment and it has left us so.

Proceedings of Societies.

BIRMINGHAM PATHOLOGICAL SOCIETY.

February 1st, 1849.

W. H. PARTRIDGE, Esq., in the Chair.

ULCERATION OF PEYER'S GLANDS AND SOLITARY GLANDS OF THE COLON.

Dr. Fletcher gave the particulars of the following case:—

John Pugh, aged 16, a boatman, was admitted a patient at the General Hospital December 12th, 1848, suffering from fever. He was an emaciated miserable-looking man, in a state of collapse, and had been brought a long way from the country. It was stated that he had been ill only nine days. Tongue dry and brown; pulse 120, weak; thirst, and low muttering delirium; a flattened state of the abdomen, painful upon pressure, especially in the ilio-cæcal region; diarrhœa; bronchial râles at the posterior parts of the chest were the symptoms which presented.

He was ordered stimulants, and small doses of Hydrargyrum cum Creta, and Compound Ipecacuanha Powder, to be repeated about every four hours, after which the diarrhœa and the bronchitis were diminished, and the pulse reduced in frequency.

On the 15th signs of sinking began to appear, accompanied by abdominal tympanitis, in consequence of which the stimulants were increased, and a turpentine injection administered.

16th. The diarrhœa came on with increased violence, and on the following morning, having been previously seized with extreme dyspnoea, he sank.

Autopsy twenty-four hours after death.—*Body* much emaciated. *Head* not examined. *Thorax*: Both lungs highly engorged; the bronchial mucous membrane universally injected; the posterior portion of the inferior lobe of the left lung condensed and friable. The heart flabby. *Abdomen*: Nothing remarkable in the liver or stomach; the spleen enlarged, and so soft as to be almost diffuent; the whole intestines presented a general increase of vascularity; the lower portion of the ilium was crowded with superficial ulcerations of Peyer's glands; the ilio-cæcal valve was thickened, and slightly ulcerated; there were small superficial ulcerations in the ascending colon; and the glands generally of this intestine were in a highly congested and hypertrophied condition. The kidneys and the primary organs were healthy.

ULCERATION OF LARYNX: EPIGLOTTIS DESTROYED: TUBERCLES AT THE APEX OF THE LUNG.

Dr. Fletcher also narrated the following case:—

Thomas Capewell, a labourer, aged 34, was admitted as a patient into the General Hospital, November 10th,

1848, affected with laryngeal phthisis, from which he had suffered for some months. He was much emaciated; voice so husky that he could only speak in a whisper; had cough and purulent expectoration, and had had hæmoptysis a month since; pulse quick; night perspirations; dulness beneath the left clavicle on percussion, where the breathing was bronchial; and there was bronchophony. R. Infus. Calumbæ, oz. viij.; Tinct. Hyosci, dr. ij.; Acid. Hydrocy, Dil., m. xx. M. Cap. oz. j. ter indies.—R. Pil. Conii Comp., gr. v.; Pil. Hydrarg., gr. iij.—M. Et divide in Pil. ij., hora somni omni nocte sumend.—R. Argenti Nitrat. Crystallarum, scr. iv.; Aquæ Distil., oz. j. M. Fiat solutio.

About every third day the interior of the larynx and the neighbourhood of the epiglottis were touched with this solution by means of a small round sponge, fastened to the end of a piece of whalebone, curved so as to form the end of one quarter of a circle, of which the diameter was four inches, whilst the tongue was strongly depressed by the angular spatula; in fact, exactly the topical treatment was adopted which has been so strongly recommended by Dr. Horace Green, of New York, by which the patient was afforded very great temporary relief, and his voice rendered nearly natural. Signs of softening of tubercle became more and more evident under both clavicles, the night perspirations and debility became extreme, and he died on the 5th of December.

Autopsy twenty-four hours after death.—*Body* extremely emaciated. *Head*: Nothing morbid in the brain. *Larynx* presented the following appearances:—Great thickening of the epiglottidean folds, and general condensation from exudation into the submucous tissue of the structures around the rima glottidis; the true and false chordæ vocales were approximated; the ventricles of the larynx were almost obliterated; ulcerations were found on the posterior points of each of the true chordæ vocales, close to their attachment to the aryteroid cartilages: they were covered by a caseous matter, which resembled tubercle; the epiglottis was destroyed by ulceration; the whole mucous membrane of the larynx and trachea was vascular and thickened, and covered by mucus. The *lungs* were very large and generally loaded with milary tubercles, the apices of both presented cavities, varying in size from a hazel-nut to a walnut. *Abdominal viscera* healthy. *Kidneys* large and congested.

This case Dr. Fletcher brought before the Society on two considerations: on the one hand as an example of the great extent of the ravages of the ulceration in the larynx in some cases of phthisis; on the other, to shew the good effect of the application of a strong solution of the crystals of nitrate of silver, according to Dr. Green's plan, which in this case, (notwithstanding the very extensive disease,) had given great temporary relief to the patient, and almost restored his voice to its natural state. To the good effects of this plan Dr. Fletcher was anxious to bear testimony, having seen great benefit resulting from its application in many cases of phthisical and syphilitic laryngitis.

TWO FATTY KIDNEYS; A SMALL CONGESTED LIVER, AND THE HEART SMALL, WITH ONLY TWO AORTIC SIGMOID VALVES.

Dr. Fletcher narrated the following case:—

Ann Smith, married, aged 45, admitted as a patient into the General Hospital on the 18th of August, 1848, suffering from general anasarca, albuminuria, and disease of the cardiac valves. She has been ill some months. She is a small spare woman, of a pale and pretty countenance; tongue clean and moist; pulse quick and feeble; anasarca of the lower extremities, and of the abdominal parietes, of a very firm and gelatinous character. She complains of no particular pain; has no cough or expectoration; has slight dyspnoea on exertion and the first thing in the morning.

The history she gives is that she had an ovarian enlargement about twenty years since, that she had rheumatism severely affecting the joints five years since, and that last Christmas she suffered from influenza, when the dropsy first appeared, and has continued ever since. She has not menstruated for two years. The chest is resonant upon percussion, and the respiratory murmur natural in all parts. A soft systolic murmur is audible opposite the sigmoid vales of the aorta, and in the course of the ascending aorta, extending upwards to beneath the right clavicle. Towards the heart's apex a similar murmur, somewhat fainter, is also audible. Urine of specific gravity 1012, strongly albuminous, on the application of heat and nitric acid, and fibrinous casts, with fat globules attached to them, were found in the urine on examining its sediment with the microscope.

She was ordered one-twelfth of a grain of elaterium every four hours, until watery motions were produced, and this action to be kept up as far as consistent with the state of the strength of the patient. Milk diet, light pudding, and arrowroot.

This plan was pursued, with great benefit to the patient, until the 5th of September, when it was thought right to give her a little beer daily. On the 7th a vapour-bath was ordered every other night. On the 9th a glass of wine daily, with the following mixture:—R. Ammon. Sesquicarb., scr. ij.; Mist. Camphor., oz. viij. M. sumat, oz. j., ter die.

On the 18th she was discharged. Scarcely any œdema remained. The sounds of the heart and lungs remained the same. Her strength had been reduced by the operation of the elaterium.

On the 8th of November Ann Smith was re-admitted. Her symptoms existed in an aggravated form; face extremely anæmic; body universally anasarca; urine thoroughly albuminous, specific gravity, 1025. The urine remained albuminous, but became of lower specific gravity; casts of tubes, studded with fat globules, were found in the sediment of the urine, and were found, all through the case, on examination with the microscope. She had several attacks of bronchitis, during which, owing to the ascitic fluid pressing upon the diaphragm, she suffered extreme dyspnoea.

On the 19th of December signs of effusion into the right pleura existed, when the dyspnoea became greatly aggravated. The treatment consisted of frequent small doses of elaterium (from which the patient derived the

greatest benefit, both with respect to relieving the dyspnoea, and lessening the anasarca and effusions generally,) blisters to the chest, and occasionally small portions of wine. In the early part of December she was acupunctured in the left thigh, from which great relief from the distension was attained, by the constant oozing of water from the minute orifices. A slight erythematous blush appeared on the surface of the thigh, and she had acute pains in that limb. She experienced great relief from the application of cotton wool.

On the 3rd of December she was acupunctured in the right arm for great distension, and at this time severe dyspnoea came on from a renewed attack of bronchitis, from which she sank on the following day.

Autopsy twenty-four hours after death. Body generally anasarcaous. *Head*: Nothing abnormal in the brain. *Thorax*: A large quantity of lemon-coloured serum in the right pleura. Both lungs much congested. The mucous membrane of the bronchial tubes highly injected, and loaded with mucus. Both lungs were below the normal volume. The heart very small, it weighed only four ounces. All its cavities and orifices were smaller than natural. The aortic orifice much contracted, its valves small and thickened, and consisted of only two divisions. *Abdomen*: Liver small and congested, of a general yellow hue; it weighed only two pounds and a half. The abdominal cavity contained a large quantity of transparent serum. The spleen had a recent coating of lymph on its surface, otherwise healthy; it weighed five ounces. The kidneys were much above the normal size, but less firm than natural; the whole cortical structure of a pale yellow colour; the outer surface, from which the capsule was with difficulty stripped, was of the same colour. The microscope revealed a mass of fatty granules throughout the structures of the kidney, free, and within the tubuli.

ANEURISM OF THE ASCENDING AORTA; DILATED AND HYPERTROPHIED HEART; LYMPH IN THE PERICARDIUM AND DISEASED AORTIC VALVES; CONDENSED RIGHT LUNG; LARGE AND CONGESTED KIDNEYS.

Dr. Fletcher gave the following history of the case:—

—Wood, aged 38, a discharged cavalry soldier, was admitted an in-patient of the General Hospital on the 9th of January, 1849, after having been for a few days an out-patient. He was a tall man, of large frame, had been eighteen years in the cavalry, and was discharged from his regiment with an excellent character two months since, from his inability to perform his duties. Eight months ago he first began to suffer from dyspnoea and cough, which he attributes to exposure to wet. He never had any attack of rheumatism. A month after the dyspnoea first appeared his abdomen began to swell. Four months since the legs became oedematous. He never lost blood. He is married and had never committed any excesses.

He now suffers from intense dyspnoea, so that he can scarcely breathe except when sitting up; has a little expectoration but no cough. His hands, legs, and abdomen are very much swollen from effusion; the skin of the feet has given way in two places, from which water is discharged in small quantities; tongue clean; appetite

bad; bowels free; he passes about a pint and a half of urine in twenty-four hours; pulse 112, small and wiry, and equal at both wrists.

On examination of the chest by percussion the right side is dull all over, but less so at the apex, and all over posteriorly for about four inches from the spine. The left side is very clear with the exception that the dullness of the precordial space is manifestly increased. On auscultation the respiration on the right side is found to be extremely feeble—scarcely audible; it is bronchial in its character, and accompanied by very obscure mucous crepitation, particularly at the lower part of the axillary region; the noise is abnormally resonant in the upper part of the front of the right side of the chest. On auscultation of the lungs of the left side of the chest, the respiration is found puerile in its character. The heart's impulse greater than normal, and both sounds accompanied with a harsh murmur, rubbing, and superficial in its character; these sounds were heard with great distinctness all over the front of the chest, particularly over the right infra-clavicular region, extending from the upper-third of the sternum. In this situation the sound is particularly loud and rubbing; and it has been remarked that here the sound is comparatively less dull upon percussion than inferiorly. Decubitus is markedly on the right side. The right hypochondrium dull and tense; the hepatic dullness extends to about three inches below the borders of the cartilages of the ribs. Urine highly albuminous. Epithelium scales, and amorphous urate of ammonia, are revealed by the microscope.

The diagnosis in this case is—pericarditis, valvular cardiac disease, with hypertrophy of the heart, desquamation, nephritis, emphysema of the right pleura, limited by adhesion of the lung, anasarca.

As an out-patient he had been blistered, and treated by mercurials, but he was so exhausted by coming to the hospital that it was thought right to give him the following slight stimulus:—R. Spt. Ammon. Aromat., m. xx.; Vini. Ipecac., dr. ss.; Syrupi Papaveris, dr. j.; Mist. Camph., oz. iss. M. Fiat haustus statim sumendus. And he was at once ordered to his bed.

10th. Dyspnoea very great, and decubitus on the right side, and all other signs of disease in exactly the same state. He seemed much less exhausted, having had some sleep. R. Hydr. Chlor., Pulv. Digitalis, Opii Pulv., Extr. Hyoscyamus utr., gr. j. M. Fiat pilula nocte maneque sumenda.—R. Tinct. Scillæ, Potassii Iodidi, Tinct. Digitalis utr., dr. j.; Mist. Camph., oz. viij. M. Cap. cochlearia magna ij., quartis horis. Empl. Lyttæ Sterno applicatur.

11th. Dyspnoea rather relieved; he expresses himself as better; the urine is increased in quantity, and is now found to become opaque by the application of heat, and to clear up again by adding nitric acid. Pergat.

12th. In the early part of the morning he appeared much better, and, soon after taking some drink, he said he felt inclined to sleep, and requested not to be disturbed, almost immediately after saying which he died. He was lying on his right side, with his head low.

Autopsy twenty-four hours after death.—*Head*: Nothing abnormal in the brain or membranes; each ventricle contained about two drachms of nearly colourless

fluid. *Thorax* : The right pleura contained about two quarts of straw-coloured serum : the fluid was contained in a sac, formed by false membrane, and occupied almost the whole anterior, the axillary, and the outer part of the posterior regions of the right side of the chest ; the anterior portion of the superior lobe of the right lung was pulled forward, elongated into a long conical process, and bound down by an old and firm adhesion to the anterior part of the diaphragm, which pulled this part of the lung over, so as to sit like a cap upon an aneurism of the ascending aorta about to be described ; the superior lobe of the lung, with its elongated process, was in a state of carnification, and adherent to the thorax by means of a thin false membrane ; the lower and middle lobes were almost everywhere crepitant, placed close to the spine, and adherent to the posterior part of the thorax : they were very diminished in size, the whole organ was not half its normal size ; the left pleura contained a small quantity of fluid ; the left lung was healthy, and filled its corresponding cavity. The sac of the pericardium contained nearly a pint of lemon-coloured serum ; on the roots of the large vessels there were a few flakes of soft lymph. There were on various parts of the external surface of the heart marks of old pericarditis, consisting of opaque white patches of thickened membrane, particularly on the anterior surface of the left ventricle ; the heart was greatly enlarged ; the left ventricle had nearly double its ordinary capacity, and its walls thickened : it was filled by a large quantity of dark semi-coagulated currant-jelly-like blood, in appearance very much like the ordinary contents of an aneurism ; a less quantity of this was found in the left auricle ; the cavities of the right side contained only the usual fibrinous clots ; all their cavities were equally enlarged with the left ventricle, but their walls were not hypertrophied to the same extent ; the orifices of the right side and the mitral were larger than natural, but without any morbid deposit on their valves ; the aortic sigmoid valves were thickened and corrugated, and did not approximate, so that a stream of water could be poured through a triangular space left between the free edges into the ventricle ; the orifice was enlarged, so as to admit of three fingers being passed through it. The whole ascending aorta was greatly dilated by an aneurism, springing chiefly from its right, and partly from its posterior side, capable of holding a moderately-sized orange ; the dilatation commenced immediately above the valves, and ended abruptly just at the point of origin of the arteria innominata ; the aneurism extended into the right side of the thorax, and lay in the root of the right lung, in close juxtaposition with the pulmonary veins ; the superior lobe of the lung fitted like a cap over its upper, posterior, and right sides, and partly overlapped its anterior surface, over which it appeared to be bound by the long and old adhesion before referred to. The superior vena cava was attached to the artery, but did not appear to have suffered compression. There was a small clot, composed of laminated, fibrinous, and discoloured blood, in the interior of the aneurism, and a small quantity of the currant-jelly-like blood, but it was flabby, and appeared as if its contents had escaped. The coats of the aneurism and ascending aorta were thin, brittle, and lined by masses of

atheromatous and calcareous matter in flakes ; the arch of the aorta, its great vessels, and the descending aorta, were perfectly healthy. *Abdomen* : The liver enlarged, and extending nearly to the umbilicus : its capsule thickened, and abnormally adherent to its surface, which exhibited a slight tendency to granulation ; the whole of the structure of the liver of a nutmeg colour, weight four pounds and an ounce. The mucous membrane of the stomach much injected. The spleen large and congested, its weight eleven ounces. The pancreas enlarged and flabby. The right kidney was abnormally voluminous, it weighed ten ounces, its whole structure much congested, particularly the cortical, which much encroached upon the pyramidal cones ; the capsule was snipped with difficulty. The surface of the kidney presented a uniformly dark red tint. The left kidney was in an exactly similar state, its weight seven ounces.

Dr. Fletcher said that this most interesting case had very closely fixed his attention, and he thought the state of the patient had been pretty fully made out, in fact all the various affections had been clearly indicated, with the exception of the aneurism of the ascending aorta. From this being so masked by the other affections, and from exhibiting no positive characters peculiar to the presence of aneurism, it is very doubtful if that disease could by any possibility have been detected ; at the same time the loud and rubbing sound which was discovered in its situation, served to indicate that there was more extent of surface for friction of the pericardium than in the normal state of that region ; and if there had been the slightest other circumstance to indicate the existence of an aneurism, that must have had its due weight in a diagnosis. The death of this patient was curious, and the circumstance of the regurgitation of the chief part of the contents of the aneurism through the patent sigmoid valves into the left ventricle. Dr. Fletcher at first thought that this must have taken place by means of a rupture of the aneurism into the right pulmonary veins with which it was closely in contact, but on examination he could find no such communication ; it appeared as if by some effort of the patient to place himself in a comfortable situation for rest, which he seemed much inclined to take, he had produced pressure upon the right side upon which he was lying, and that this, through the fluid which that side contained, was communicated to the parietes of the aneurism, and had the effect of compressing it, and emptying it of its contents which regurgitated into the cavity of the left ventricle. It must be borne in mind that the lung was found in a very incompressible state, so that from the state of the contents of the right side of the thorax, it is very fair to conclude that any external pressure upon the parietes of the chest might readily be communicated to the aneurism.

(To be continued.)

MEDICAL LEGISLATION.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND
SURGICAL JOURNAL.

Sir,

As a memorial of some of the Manchester medical men has appeared in our Journal, I beg to forward you a copy of a letter I have written to the Secretary of State, concluding it will be thought just, that as one opinion on this matter of Medical Reform has been published in our columns, all sides of the question should appear there.

I remain, dear Sir, yours faithfully,
GEORGE KELSON.

Sevenoaks.

(Copy.)

Sevenoaks, April 27, 1849.

Sir,—I humbly, yet most earnestly, beg to claim your most serious consideration on the long contested subject of Medical Reform.

I was deeply interested, and most actively engaged, in a memorial presented to you in 1845, imploring you to preserve *intact* the present Charter of the Royal College of Surgeons of England.

This said memorial I beseech you carefully to *re-peruse* and consider. To it were attached the signatures of many medical men,—men of great worth and influence in the medical world, residing in various parts of the United Kingdom. Their respective commands for their signatures I still possess, and if I could imagine it possible a doubt could be cast upon their integrity of purpose, or their anxiety for the cause, or their capability of judging in this matter, I would boldly suggest that inquiry be made into the character and position of every person whose name is attached to this said memorial, and that their petition do stand or fall by the result of the inquiry.

I still urge you, Sir, to preserve this said Charter *intact*.

I so far agree with my professional brethren of Manchester, who have lately memorialized you, that "no satisfactory reason exists for the establishment of a College of General Practitioners in England."

I am confident such an establishment would place not only surgery, but also the profession at large, in a most anomalous and confused condition, and that it would be prejudicial and injurious both to the profession and to the public.

If *Reform* be required, I fearlessly assert it must commence with medical men themselves, who should be Christians and gentlemen; all of them who are not such should be entirely unnoticed by those who maintain a correct conduct.

If *illegal practice* is to be put an end to, let it be clearly defined what is not legal practice, and let the mode of punishment for illegal practice be rendered as facile as possible, by the recovery of penalty after penalty in the County Court.

Registration in England, different from what now exists, cannot be required. The Royal College of

Physicians prints a list; the Royal College of Surgeons prints a list; the Worshipful Society of Apothecaries prints a list.

If the *Curriculum* of education do not meet the views and the necessity of the day, let it be altered by the *Board of Examiners*. Surely this, in reference to General Practitioners, can be effected as efficiently by the existing Board of Examiners, as it would be by a Board formed of other medical men selected from the same *order* of the profession.

I beg particularly to call your attention to the "*Board of Examiners*." With all due respect for, and deference to, the present Board of Examiners, of such as now seek legally to become General Practitioners or Apothecaries, (and I know this Board to be composed of "good men and true,") I do think here there might be a great improvement, even though a short Act of Parliament might be required to accomplish it,—viz., let the present Board be empowered to add *Professors* of the various branches of examination, leaving to the members of the Board themselves, if they desire it, the examination practically in physic, and, certainly, the general controul of the Board.

This suggestion, with, at least, equal force, will apply to any other Board of Examiners formed of General Practitioners, because General Practitioners, of sufficient age and ability to be qualified for this undertaking, may naturally be supposed to be so much engaged in practice, that they cannot have leisure to keep pace with "the times" in the study of the minutæ of science; whereas, a *Professor* who is daily *teaching*, is *hourly learning*; and is thus alone fitted for an examiner in the various branches of the profession.

I have the honour to subscribe myself,

Sir,

Most respectfully,

Your obedient servant,

GEORGE KELSON.

To the Right Hon. Sir George Grey, Bart.,
&c. &c. &c.,
Whitehall.

SUBSCRIPTIONS OF POOR-LAW MEDICAL OFFICERS.

To the Poor-Law Medical Officers of England and Wales.

Gentlemen,—Several of the contributors to the fund for defraying the expenses incidental to the proceedings of the Committee of Poor-Law Medical Officers, have expressed their wish that the names of those gentlemen who have subscribed should be printed, in the hope of others being thereby induced to contribute.

We have reason, however, to know that other gentlemen would wish their names *not* to appear in print. Under these circumstances the Committee refrain for the present, at least, from printing a list of the names of subscribers.

At the same time that the Committee desire to express their thanks for contributions received, they

beg to state, that there being 2914 Poor-Law Medical Officers, they have received 343 subscriptions only, since the meeting on the 19th February, and of these, several were from gentlemen who had subscribed once, and in one instance twice, before.

It is hoped, therefore, that those gentlemen who have as yet contributed nothing, will not consider themselves as excused from assisting, in however small a degree, the fund for the purposes already stated.

I have the honour to remain, Gentlemen,

Your obedient servant,

THOMAS MARTIN,

Treasurer to the Committee.

Reigate, April 30, 1849.

INTRAMURAL INTERMENT.

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled.

The Petition of the President and Council of the Gloucestershire Medical and Surgical Association,

Showeth,—

That your Petitioners are of opinion that the interment of the dead in towns and populous districts is *highly injurious to the public health*, and that no measure of Sanitary Reform is complete unless this obnoxious system is *at once and for ever abolished* by legislative enactment.

That your Petitioners desire to express their unfeigned satisfaction that this national grievance was the subject of inquiry by a Committee of your Honourable House in the year one thousand eight hundred and forty-two, who reported, that “after a long and patient investigation, your Committee cannot arrive at any other conclusion than that the nuisance of interments in large towns, and the injury arising to the health of the community from the practice, are fully proved.”

That, from the evidence adduced before the Committee, and the many subsequent exposures of the lamentable and terrible consequences resulting, and necessarily arising, from the present system of interment, your Petitioners venture to express their earnest desire, that the burial of the dead in the midst of the living may be prohibited by the closing of all burial places in cities, towns, and populous districts, and by the adoption of such measures as may secure the public from the injurious and debasing practices at present existing.

That your Petitioners cordially support the efforts now making by the National Society for the abolition of burials in towns, and they desire respectfully to add their testimony and influence, as experienced medical practitioners, in aid of a measure at once politic and humane, and worthy of an advanced civilisation.

NOTES ON AMERICA: ITS MEDICAL SCHOOLS AND ESTABLISHMENTS.*

By EDWARD HUMPAGE, Esq., M.R.C.S., Bristol.

QUARANTINE ESTABLISHMENT: CHOLERA: YELLOW FEVER: GASTRO ENTERITIS.

In the beautiful Bay of New York lies Staten Island, which from its lovely situation is the resort of many of the wealthy citizens, especially in the summer season, at which time the air is so much cooler than in the neighbouring city. The splendid villas of the merchants rise in all imaginable shapes on the fine slopes of the western extremity of the island, and add much to the surpassing beauty of this magnificent bay. Here also is the Government Dépôt for invalids, as they arrive on board the various emigrant ships from Europe. It is a most extensive range of buildings, and is known as the “Quarantine Ground,” comprehending a Marine Hospital, for the reception of patients suffering from contagious diseases, a department for yellow fever, a small-pox hospital, besides several other buildings for the use of the physicians, health officer, and others. The whole establishment is on a very large scale, and will afford accommodation for 1000 invalids. By the politeness of two of the medical officers, Dr. Whiting and Dr. Cucha, I had the privilege of visiting this excellent establishment on two or three occasions.

By the laws of the State of New York, all foreign ships entering the bay must cast anchor on the Quarantine Ground, hoist the yellow flag, and be subjected to an examination by the health officer, who, on finding the crew and passengers healthy, gives a certificate that admits them into port. This precaution is highly necessary, from the multitudes of emigrants constantly arriving from Europe, among whom ship-fever so frequently prevails. All cases of diseases are immediately removed into the hospital, so that sometimes they have a sudden accession of patients, amounting to three or four hundred, the great majority being Irish or Germans. On my first visit I saw a large number of the latter just imported from Bremen; they were suffering from fever and dysentery. The treatment adopted is very simple, such as abdominal fomentations, small doses of grey powder, with Dover's powder at night, and chalk mixture or salines, according to circumstances. When there is much cerebral disturbance, the head is shaved, and ice or evaporating lotion is used; depletion is not well borne, and rarely or ever practised. Much importance is attached to *ventilation*, which is practised to an extent very far beyond that adopted in English hospitals, and the temperature of the wards is usually sixty degrees,—never more than sixty-five degrees, Fahrenheit.

The different apartments being constructed of wood, openings, about two feet by one, are cut in the walls, at intervals of twelve or fourteen feet, just above the floor; these openings being opposite each other, afford a fine current of fresh air; and the same arrangement

being adopted near the roof, most completely prevents any accumulation of foul air, and thus the fresh air becomes a constant remedy in the treatment of disease, affording an illustration of the good effects of pure air, and of its immense value as a prophylactic agent. Many of the cases admitted, indeed, recover merely by the use of a simple diet, and the change of air from the crowded steerage of the emigrant ship, to these well-ventilated and comfortable apartments.

Cases of yellow fever had been numerous during the autumn, as it appeared among the soldiers returning from the war in Mexico.

I saw the peculiar "vomit" of the disease, many specimens of which were preserved in sealed bottles; it was evidently sanguineous, and corresponded with the usual description of coffee grounds. This fearful malady is treated on general principles, it is regarded as fever of a typhoid type, and a very gentle and careful management succeeded best, the "*medicina perturbatrix*," being quite out of the question. It is frequently observed, that chronic dysentery is the sequela of yellow fever, and is best combated by the use of the nitrate of silver, on which more dependance is placed, than on the sulphate of copper.

On my second visit to the Quarantine Establishment, (December 4th,) I found some consternation excited by the presence of cholera; its introduction took place by the arrival of the packet ship *New York*, from Havre-de-grace. The history given by the Captain was, that after being at sea fourteen days, several of the passengers became sick, had diarrhœa, and in a few days some died; these cases were followed by others, showing more severe, and rapidly fatal, symptoms. Fifteen cases had been received into the hospital, of which seven had proved fatal: eight were under treatment, one of which, a child about eight years old, was very characteristic of the disease as we saw it in England in 1832,—the sunken eye, collapsed features, cold tongue, contraction of the abdominal muscles, and rice-coloured evacuations. The child was seized about fourteen hours before my visit; she died in four hours afterwards. Another case was that of a woman far advanced in pregnancy; she was seized with the usual symptoms, and died in twelve hours. The treatment adopted was the use of the hot-air apparatus, and frictions of the surface with tinctura capsici; calomel was administered internally, and I believe also opium, but here, as everywhere else, the awful rapidity of progress entirely counteracts the influence of ordinary remedies. In the cases which recovered the symptoms were milder, and thus afforded time for the successful exhibition of remedies.

The origin of cholera on board this emigrant ship would lead us to believe in the *spontaneous generation* of the disease, under peculiar circumstances. The passengers and crew left Havre all well; there was no cholera in the town. The number on board was upwards of 300, and they were badly provisioned, so that complaints had arisen among them about the food and water before any symptoms of disorder appeared. No systematic ventilation was practised, nor had the ship any surgeon, so that everything concurred to favour the appearance of disease.

It was remarked by the Captain, that at the time he first heard of any sickness among the people, (being off the coast of Nova Scotia,) the thermometer fell eighteen degrees within a few hours; how far this was a coincidence, or had any relation to the sudden appearance of diarrhœa, of course is matter of conjecture. The emigrants thus affected had not been in the hospital many days before several convalescents were attacked, and some died, with all the symptoms of cholera, so that the impression on the minds of the medical attendants was, that *under certain circumstances* the disease was *contagious*; the patients in the convalescent ward were separated entirely from the new patients, and I believe no farther propagation of the disease among them took place. It should be stated that these convalescents were all parties who were just recovering from gastric fever, and therefore would be peculiarly liable to such an attack.

My own impression is, that the poison of cholera may be propagated from one person to another under peculiar circumstances, but that, with ordinary precaution as to *cleanliness* and *ventilation*, we may generally prevent such a thing from occurring.

The appearance of the disease on board this emigrant ship shows how important is the appointment of a surgeon, as there is every reason to believe that in this instance the malignity of the disease was entirely owing to an accumulation of filth in the steerage of the vessel, and to the neglect of the early symptoms of sickness and diarrhœa.

Since I left New York the statement of the appearance of cholera in several of the transatlantic cities is confirmed, and I should fear, with the approach of warm weather, we may expect to hear of a serious return of the disease in a climate where gastric irritation is so common, and diseases of the mucous membranes always rife.

(To be continued.)

General Retrospect.

PHYSIOLOGY.

ON THE STRUCTURE OF THE PAPILLÆ OF THE TONGUE.

Mr. Hassall states that a minute and careful examination of the papillæ of the tongue has convinced him that the term conical, as applied to certain papillæ of that organ, is a misnomer, and that these are excavated and cupped in form.

Corresponding with this general shape of the papillæ, and determined by it, is the arrangement of the secondary papillæ, of a number of which each compound papilla is made up in a circle, the boundary of which corresponds with the raised margin of each cup.

The vessels and nerves supplying these papillæ of course follow a similar circular distribution.

In the recent state, and while the epithelium still remains attached to the subjacent structures, it is not easy to make out the true form of these cupped papillæ, in consequence of the number of filiform processes which are attached to them, obscuring it;

near the front of the tongue, however, and where these filamentary processes are either entirely absent or very short, the cupped form may be very readily determined, even while the epithelium is still adherent.

It is worthy of remark, that the processes in question, which are constituted of epithelium, follow the same circular arrangement which appertains to the papillæ and loops of blood-vessels and nerves; and also that they spring from the raised margins of the cups.

These observations are both interesting and important, because they disprove the opinion entertained by many physiologists and microscopists, that the filiform papillæ of the tongue have merely a mechanical office to perform, and that they are not concerned in any degree in the sense of taste, the form and arrangement of the several parts of each papilla showing an evident adaptation to the reception of gustatory impressions.

The filiform appendages entangle and delay the smaller particles of the food, and the cavities of the papillæ receive the nutritious juices, and retain it for a time sufficiently long to produce the necessary impression on the sensory papillæ by which each cup is encircled.

Considered altogether, it would be difficult to imagine or devise an arrangement of parts more admirably adapted to the purpose to be fulfilled.—*Lancet*, March.

ANIMAL CHEMISTRY.

DISCOVERY OF THE CONSTANT PRESENCE OF GRAPE-SUGAR IN THE WHITE OF EGGS.

Dr. Aldridge having been called on by the President, stated that he had to announce to the Academy the discovery by him of sugar, identical with the sugar of grapes, of honey, and of diabetes, being an essential constituent of the white of the egg of the common domestic fowl. In using the ordinary tests for the presence of this substance, the results will be found to be slightly modified, probably by the presence of other constituents. When white of egg is mixed with an equal bulk of potash water, and boiled, as in Moor's test, the liquid becomes of a deep amber colour; when the white of egg is mixed with some potash water, and then with hydrated oxide of copper, as in Capezzuoli's test, the latter dissolves, forming a fine pink solution, which, after some time, decomposes, throwing down a *brown* precipitate, probably on account of the presence of sulphurets. When the white of egg is mixed with potash water, and then a few drops of solution of sulphate of copper added, an intensely *red* coloured solution becomes formed, which, upon boiling, deposits a *brown* sediment.

But the cause of these reactions can be separated from the albumen of the white, and will then be found to present all the ordinary characters of grape sugar. To obtain this substance in a separate form, the whites of eggs are to be beat into a smooth pulp, with an equal bulk of rectified spirit of wine, specific gravity 850, and then heated; when approaching the boiling point of the spirit, the mixture will rather suddenly separate into a firm coagulum of albumen, and a straw-coloured spirituous liquid. The latter is to be strained off, and an additional quantity can be extracted from

the coagulum by strong impression. This liquid, which is highly alkaline, is then to be evaporated in a water bath, and during the evaporation transparent gelatinous-looking pellicles will be found to form, at first yellowish, but towards the termination, of a deep reddish brown, which are from time to time to be removed and preserved. Those pellicles are of an albuminous nature, becoming of a deep orange colour, when treated alternately with nitric acid and water of ammonia, although peculiar in being obtained by the evaporation of a spirituous liquid, from which no precipitate was capable of being thrown down by nitric or acetic acids. It is from these pellicles that the sugar is to be extracted, which can be done by triturating them with rectified spirit of wine, when they become whitish and opaque, then boiling and filtering. By evaporating the filtered liquid to the consistence of a syrup, and immersing in a freezing mixture, grains of grape-sugar will deposit on the sides and bottom of the vessel. These, as well as the syrup which yields them, have a taste at first intensely sweet, followed by a saline after-taste, from the presence of accompanying salts. They dissolve without discolouration in cold sulphuric acid, and behave in every respect similar to the sugar of diabetes.—*Medical Gazette*.

SURGERY.

SEVERE CHRONIC SCIATICA; INSTANTANEOUS CURE BY THE APPLICATION OF THE ACTUAL CAUTERY TO THE BACK OF THE FOOT: CHLOROFORM EXHIBITED.

By M. Robert.

A woman from the country, aged 50 years, of good constitution and naturally portly, had been tortured during the last fifteen months with severe sciatic pains in the right limbs as low down as the foot. These pains were so insupportable each night, that she was obliged to get up and walk about the room. During the day her sufferings abated a little. Various remedies had been used without success, especially blisters frequently repeated. On examination no change could be detected in the normal physical condition of the limb; the patient had become thin in consequence of the sleepless nights she had passed. M. Robert had her put under the influence of chloroform, and with a red hot iron made a good stripe along the outer part of the dorsal aspect of the foot, precisely in the direction of a line drawn from the external malleolus to the third and fourth toes. As soon as the patient came to herself she declared that the pain had completely left her. The following night she was perfectly calm and able to sleep for the first time; the pain has not returned at all since, and were it not for the suppurating wound upon the foot she might quit the hospital in a few days.

To-day, (fifteen days since the operation,) the cure of the sciatica has undergone no alteration, and she complains only of a slight smarting in the artificial wound. She will soon be able to leave the hospital, perfectly cured. This case ought to be added to the number of other parallel cases which we have previously reported as occurring in the practice of M. Robert. The treatment was first adopted by an Italian surgeon,

Petrini, who practised for many years at Naples under the name of Catugno, and being of great efficacy, is deserving the attention of practitioners.—*Annales de Thérapeutique*, Mars.

OBSTETRIC MEDICINE.

DR. SIMPSON'S AIR-TRACTOR.

[A paragraph having appeared in a former number of this Journal, being an abridged extract from the *Medical Gazette*, on the subject of the claim made by Dr. Mitchell, to the discovery of the air-tractor, we are requested by Dr. Simpson to insert the annexed letter to the Editor of the *Medical Gazette*.—Ed. J.]

To the Editor of the *Medical Gazette*.

Sir,—It certainly was neither my wish nor intention to join in the controversy relative to the air-tractor, which you have lately given in the pages of the *Gazette*. But as you have thought fit to write editorially on the matter, in your last number, and as your own remarks, and those of your correspondents, are, I think, calculated to do me unintentional injustice, I hope you will excuse me troubling you with one or two observations merely in my own personal defence.

1. In the *Gazette* for March 23rd, you published a short anonymous letter containing the following accusation:—"Dr. Simpson, of Edinburgh, lays claim to the merit of discovering the applicability of atmospheric pressure in aid of delivery." Now this accusation is totally groundless, because it is totally untrue. I never laid claim to any such merit. On the contrary, I have always given it to whom it is due,—viz., to Dr. Arnott. In the first published notice of the subject, I quoted in full Dr. Arnott's own words, in which he suggests the principles of the instrument. Could I do more? Let me add, that Dr. Arnott first published the suggestion in 1827; and at that time the editor of the *Medical Gazette* both derided the proposition and its originality.*

2. Dr. Mitchell sets out in the first sentence of his first letter to me, as given in your pages, with stating "I was rather surprised to find that you had not acknowledged me (Dr. Mitchell) as the discoverer of the application of the principle in such instrument." I have already stated that I gave the merit where I deemed the merit due,—viz., to Dr. Arnott; and I was not, till the last month, in the slightest degree aware that Dr. Mitchell had in any way attended to the subject, though I knew that other gentlemen had made attempts to reduce Dr. Arnott's suggestion to practice.†

* "We find the old sucking-horn of Hildanus brought into use for a most extraordinary purpose, being no less than to draw the child out of the womb. And we find a renewal of that most absurd idea, noticed in Pare's work, and so well ridiculed in Mr. John Bell's 'Principles of Surgery,' of applying a child's sucker to raise depressions of the fractured skull. Where is the limit to absurdity?"—*Medical Gazette*, vol. i. p. 219.

† As, for instance, Mr. Paul, one of the best pupils that attended my class during the same year as Dr. Mitchell. Mr. Paul proceeded in the matter much further than Dr. Mitchell. He did not, like Dr. Mitchell, merely write and theorise about an instrument, but tried to make one. Dr.

but without success. I feel certain that if Dr. Mitchell will only get an instrument constructed on his proposed plan (as given in the sketches he has sent me in his first letter,) he will find, I believe, that it is powerless and useless, and that it is not applicable in practice.

Let me add, that I am sure that no man can honestly accuse me, on any occasion, of ever failing, either in lecturing or in writing, to do every possible justice in my power to other investigators, and in distributing *sum cuique*, as far as my knowledge went.

3. In the first published notice of the air-tractor (see *Monthly Journal* for February, p. 556, and *Medical Gazette* for March 16, p. 480,) after mentioning the first case in which it was tried, in December last, I added that I "was not aware that any one had applied practically this obstetric means before it was employed in the case detailed. But the idea of using such a power had been long ago proposed by a gentleman for whose works and talents they all entertained the utmost respect,—Dr. Neil Arnott, of London. In his admirable word on Physics, Dr. Arnott alludes to the subject in the following words," &c.

In commenting upon this statement, Dr. Mitchell, in the *Gazette* (p. 531,) observes,—“He (Dr. Simpson) states that no one before himself, as far as he was aware, had made a practical application of Dr. Arnott's suggestion. The medical public (adds Dr. M.) will now see that he must have been perfectly well aware of its previous application by me.” Now, I still believe, that up to the time at which the above notice was published by me, no one had applied the aforesaid principle in practice. Dr. Mitchell avers he had applied it previously. If Dr. Mitchell will give the date of any case or cases in which he applied it, that date would settle the question; and I will at once yield the point if I am wrong.

4. In answer to Dr. Mitchell's first letter, I assured him that in the construction of the air-tractor I received no hint or suggestion “from his competition exercises, and that I never, as far as I knew, looked at these exercises, as the whole were entrusted to others to decide upon.” Allow me to add, that not only did I not read Dr. Mitchell's exercises, or those of the other competitors (four of whom were awarded with prizes,) but up to the date of his letter to me I never heard, from himself or from any other person, the most distant hint of any ideas of his about the construction of an air-tractor.

On asking Dr. Duncan, who read the exercises over, he assures me that from the time of his looking over the papers till I showed him Dr. Mitchell's letter, he had no remembrance whatever of Dr. Mitchell alluding to the subject; and his observations on it, let me add, must, I think, have been most entirely out of place in such exercises, as none of the twelve questions given out, referred at all to instrumental delivery. If Dr.

Mitchell alludes to my suggesting the investigation, as a fit subject for the ingenuity of my pupils, in 1847-48. When lecturing, I have always been constantly in the habit of directing specially the attention of my pupils from time to time to subjects open for new inquiry, and tried to stimulate them to think on such matters for themselves, write their theses on them, &c.

Duncan did not attend to such a subject thus irrelevantly introduced into the exercises, and in which subjects he (Dr. Duncan) was in no respect interested, I do opine he was in no degree to blame, as you seem to think he was.*

5. In my note to Dr. Mitchell (see *Gazette*, p. 520,) I stated that "I had thought and talked often of making an air-tractor, such as I have latterly constructed, long before you were my pupil."

Dr. Mitchell affects to doubt this. I have mentioned Dr. Arnott's suggestion and the subject publicly, at more or less length, every year in lecturing, since I commenced teaching midwifery, ten years ago. It very seldom does happen that a subject of mere medical conversation happens to be a subject of actual record; but in this case it oddly and fortunately enough happens that it is so. In February, 1848, six or eight weeks before Dr. Mitchell's prize exercises were written in my class-rooms, Dr. Clay, of Manchester, was called down professionally to Edinburgh, to perform the operation of ovariectomy. In his *Obstetric Journal* for 1st February last, Dr. Clay, in speaking of the air-tractor, the utility of which he doubts, observes:—"The instrument is not new to us, having conversed with Dr. Simpson a year ago on the subject."—p. 60.† At last, in December, 1848, I was induced to set about the construction of a proper instrument in consequence of witnessing, in the Royal Infirmary here, some trials with the artificial French leech; and at first I thought that an exhausting cylinder and piston, on the same principle, would answer best. In pursuing the investigation after it was once begun, I had to make innumerable trials with, and changes on, the instrument before I obtained a form practically and really useful.

6. Dr. Mitchell purports to report correctly, to you and to your readers, various circumstances relative to my statements in lecturing and awarding the prizes, &c.; and founds various conclusions upon his own memory for his own argument. Dr. Mitchell says, that in my lectures I stated that I had "attempted in vain, at the Edinburgh Maternity Hospital, to apply a leather sucker to a child's head." I did not state anything of the kind, because I never made any such attempt. I never tried till last December to apply the principle in actual practice.

Lastly. Permit me to observe again, that we are indebted to Dr. Arnott for first suggesting the "applicability of atmospheric pressure in aid of delivery;" and

if I have any claim to any merit in the matter, it is this,—that after Dr. Arnott's idea had lain dormant and useless for twenty years, I reduced Dr. Arnott's suggestion to actual practice,—was the first to construct a useful and applicable air-tractor,—the first to use such an instrument in practice,—and the first to point out the cases fit for its use. Further, in the construction of the air-tractor, I was indebted to no one but Dr. Arnott, in even the remotest degree, for any hint or aid whatever. I may be, perhaps, excused for adding, that I have now employed it repeatedly, both in cephalic and pelvic presentations, and both when the head was still high above the brim, and already sunk into the pelvic cavity; and I believe that the construction of the air-tractor is still very far from being so perfect as it will yet be rendered.

Yours, &c.,

J. Y. SIMPSON.

Edinburgh, April 7, 1849.

TOXICOLOGY.

RECOVERY FROM THE EFFECTS OF A LARGE DOSE OF DIGITALIS.

By M. de Colleville.

A woman, aged 68, while suffering from œdema of the lungs, and when nearly convalescent, was ordered to take an infusion of the dried leaves of digitalis, in the proportion of (60 centigrammes) $9\frac{1}{2}$ grains in a quart of water. The druggist by some accident used (15 grammes) $231\frac{1}{2}$ grains. This was infused in eight glasses of water, and administered to the patient in divided doses. She was soon attacked with great uneasiness, nausea, bilious vomiting, confused vision, amounting to blindness, ringing in the ears, vertigo, convulsions, and syncope. The face was pale; there was great coldness of the skin, with palpitation; thready slow, and intermittent pulse, and pain in the abdomen. The effects were produced by four doses of the infusion. A physician who saw the patient the following morning found her in a highly dangerous condition. He prescribed saline enemata, sinapisms with warm bottles to the feet, and frictions with camphorated spirit to the skin. Strong coffee was administered internally. In six hours there was no apparent amendment: the vomiting, convulsions, and fits of syncope continued, but the difficulty of breathing under which the patient had previously laboured had entirely disappeared; there were no longer symptoms of œdema of the lungs, and the chief object then was to counteract the effects of the poison. Syrup of orange-peel and other simple medicines were prescribed, and an enema of assaœtida and camphor administered. Three days after the accident the vomitings were less frequent, and the syncope and convulsions had ceased, but there was still vertigo, with ringing in the ears, and hallucinations of vision. In six days the patient had perfectly recovered from the effects of the poison.—*Journ. de Méd. de Bordeaux*.

* Of course we do not blame Dr. Duncan for want of memory. As Dr. Duncan decided against Dr. Mitchell, he must have read his papers; and we confess that it appeared extraordinary to us, that although no long time had elapsed, he did not recollect that a description of an air-tractor had been given in one of the exercises, when public notice was so strongly called to the invention by Dr. Simpson. It is evident, however, from Dr. Simpson's statement, that he, Dr. Simpson, knew nothing of the contents or relative merits of the papers, and that Dr. Duncan had wholly forgotten this reference to the air-tractor.—*Ed. Gaz.*

† Dr. Simpson has forwarded to us a letter from Dr. Paterson, by which it appears that so long back as the year 1836 the subject of the air-tractor had been discussed by them.—*Ed. Gaz.*

ILLICIT PRACTICE OF DRUGGISTS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND
SURGICAL JOURNAL.

SIR,

On perusing your Journal of to-day, I there see to my great satisfaction, your attention directed, by a constant reader, to the illicit practice of druggists. Alas! what an odium on our should-be-liberal profession. Whom have we to blame for this great outrage on society and injustice to ourselves but the very heads, I am truly sorry to say, of our profession,—physicians and those in extensive practice acting as such, who are, perchance, too busily engaged to compound their own medicines, or consider it degrading and not sufficiently genteel to do so.

In my opinion, if ever the medical profession is to be what it ought, we should have a *full and constant* exposure of all its abuses for the general good of its members; and in consideration of a general good, a ready foregoing of all selfishness and individual interests; the physician, openly and firmly co-operating with the surgeon-apothecary and apothecary, instead of, I fear, as is too frequently done, sacrificing both his principle and his best feelings, as well as in very many instances, the welfare of his patient, to a mutual understanding with the mere druggist, who is generally self confident and presuming in proportion to his support and ignorance. How disgraceful such conduct! What we want is individual reform, and until this is accomplished, an entire and unreserved exposure of all abuses and inconsistencies. I should suggest that physicians and those not dispensing their own medicines, should forthwith convene meetings and enter into proper measures and arrangements for the purpose of preventing prescriptions, as far as could be done, from falling into the hands of druggists or illegal compounders, and I am persuaded more real and intrinsic good from this will redound both to the public and to the profession than any other measure which could be adopted. There is, it is much to be feared, no disease in this country incident to man, more destructive than the interference of druggists and quacks; and any physician conniving at a druggist and furthering his views by supplying him with prescriptions for use, ought to be publicly exposed.

I am, Sir,

Yours very respectfully,

A MEMBER OF THE PROFESSION.

April 18, 1849.

N.B. I shall feel obliged by your giving insertion to the above.

SURREPTITIOUS PUBLICATION.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND
SURGICAL JOURNAL.

SIR,

My attention has been called to a small pamphlet purporting to be a reprint of a paper of mine, which was published some weeks ago.

The pamphlet has been circulated amongst many members of the profession. It is not at all a true copy of my paper, and is evidently printed to obtain some object, the nature of which I am at a loss to

comprehend. It is stated to be published by a firm not in existence, as I have ascertained, and has no printer's name attached to it.

It is scarcely necessary for me to state that I knew nothing of the pamphlet until it was shown to me late last night by a friend.

If you will do me the favour to insert this note in your next Journal, I shall feel particularly obliged to you.

I am, Sir, yours faithfully,

G. T. GREAM.

42, Hertford Street, London.

May 9, 1849.

EXTRAORDINARY BIRTH.

On Monday, April 9th, 1849, I was summoned hastily at a quarter past seven o'clock, p.m., to attend Mrs. D. in labour, the wife of a respectable shopkeeper in this town. She is 35 years of age, well-formed, and rather corpulent. Has had two children before, one aged seven years the other five, both living. The husband is a strong active man.

Mrs. D. had attended a funeral on the afternoon of the above date, and was taking tea with the party, a few doors from her own house, when labour commenced. She went home, walked up-stairs, and pains coming on in rapid succession, the child was born at half-past seven p.m. At this time she was alone, but her cries brought assistance. A neighbour divided the cord, and carried the child down stairs to the kitchen fire, not having yet noticed anything unusual. The child cried lustily.

On my arrival, which was immediately after the separation of the child, I proceeded to extract the placenta, and was then called down stairs in a most mysterious way,—concern and amazement being depicted in the messenger's countenance. On examination of the child, (a male,) I found it possessed neither upper nor lower extremities, but in place of them, four short stumps between two and three inches long, and closely resembling the ordinary stumps after amputation. The head, chest, and abdomen were fully formed, the genitals also. The anus was small and contracted, but a director passed readily into the bowel, and the child had already voided meconium into the wrapper. On passing the finger along the median line of the sacrum a projection or spicula of bone was to be felt, giving the impression that the lower posterior arches of the sacral canal were not complete. The two central incisors of the upper and lower jaw are quite distinguishable and prominent in the gum.

Friday, April 13th. I have this day seen the child. It is well, and takes nourishment. I obtained the following measurements:—

BODY.

Inches.

- | | |
|---|------------------|
| 1. Entire length of body from vertex to nates | 12 |
| 2. Round chest under axilla | 11 $\frac{1}{2}$ |
| 3. Round abdomen | 11 |

HEAD.

- | | | |
|--|-----|--|
| 1. From nasal to occipital protuberance .. | 6½ | |
| 2. From ear to ear across vertex | 7½ | |
| 3. Circumference of head above the ears, viz.,
from ear to ear across frontal bone 8½ in.;
continued across occipital bone 5 in. | 13½ | |

EXTREMITIES.

- | | |
|---|---|
| 1. Stumps of two upper extremities equal .. | 3 |
| 2. Stump of right lower extremity | 2 |
| 3. Stump of left lower extremity | 3 |

I certify that the above is a correct statement.

FRED. SMITH GARLICK, Surgeon.

5, Cheapside, Halifax.

Medical Intelligence.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, April 27th, 1849:—R. E. Rusher; F. J. Earle; C. N. Foote; T. B. Phillips; J. W. Saunders; T. S. Rowe; J. W. Smith; C. Welch; J. H. Lakin.

Gentlemen admitted Members on Friday, May 4th:—George Gwynn Brown, Stourport; William Clapham Cantley, Hedon, near Hull; Robert Charles Hurst, Bedford; James Lorcan Kennedy, London; Charles Lowdell, Lingfield, Surrey; John Jones Merriman, Kensington; William Ferdinand Wratisslaw, Rugby, Warwickshire.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates on Thursday, April 26th, 1849:—John Candler, Walpole, Suffolk; George Hatt Cook, Tetbury, Gloucestershire; William Evans, (as assistant,) Glamorganshire; John Gaman, Hambleton, Hants; Robert Coane Roberts Jordan, Teignmouth; William Annable Skinner, Headcorn, Kent; William Palmer Steele, Abergavenny; William Henry Tinney; Ottery St. Mary, Devon; John William Trotter, Durham; Thomas Henry Waterworth, London; Henry Wellings, Royal Navy; John Horseley White, Wolverhampton; John Wood, Bradford, Yorkshire.

Admitted Licentiates on Thursday, May 3rd:—George Down, Pimlico; George Anthony, Kirsopp Lake, Devonshire; Thomas Mudge, Bodmin, Cornwall; Daniel Rossiter, Frome, Somerset.

OBITUARY.

Died, May 3rd, at Brighton, in the 67th year of his age, Joseph John West, M.D.

May 5th, at Feckenham, Worcestershire, Edward P. Turner, Esq., Surgeon, aged 31.

May 10th, at Worcester, after three months serious indisposition, Robert James Nicholl Streeten, M.D., Secretary to the Provincial Medical and Surgical Association, and Editor of this Journal.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

ANNIVERSARY MEETING.

The programme of the approaching Anniversary will be advertised, as usual, in the following number of the Journal. It will be held at Worcester, on Wednesday, August 1st, and Thursday, August 2nd, under the Presidency of Charles Hastings, M.D., F.G.S.

The "Addresses in Medicine" and "Physiology" will be read respectively by Dr. C. W. Bell, of Manchester, and Dr. Sibson, of London, late of Nottingham.

Communications usually addressed to the Secretary, to be forwarded to J. P. Sheppard, Esq., Foregate Street, Worcester.

NOTICE TO MEMBERS.

Gentlemen who have not yet paid their subscription for the current year, or who are in arrears, are requested immediately to forward the amount due to the Treasurer of the Association, as the accounts are now about to be made up for the Annual Meeting.

CHARLES HASTINGS, M.D., F.G.S.,
Treasurer.

TO CORRESPONDENTS.

Communications have been received from Mr. Leach; Æsculapius; Dr. Butler Lane; Diogenes; Dr. Buller; Dr. Ballard.

We have received a communication from Mr. Skevington of Ashbourne, Derbyshire, with a notice of an inquest on Henry Vernon, of Brailsford, in the same county, who died from injuries received in a public-house brawl. It appears that Mr. Skevington, who did not see the deceased during life, attended the inquest and was subsequently refused a fee by the Coroner. He was neither examined nor summoned in the official manner, although informed by the father that he would be wanted. Under these circumstances we cannot see that there is any blame attached to any party, for although Mr. Skevington may naturally enough feel annoyed at his loss of time, still the error arose from his attending to the request of the father of the deceased, without waiting for an order from the coroner himself. We believe it is almost universally the custom for the coroner to select the medical opinion, when, as in the case before us, there had been no medical attendance during life.

In consequence of the lamented death of Dr. Streeten, it is requested that all letters and communications be sent to J. H. Walsh, Esq., Foregate Street, Worcester. Parcels and books for review may be addressed to the care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON SURGERY,

DELIVERED IN THE

MEDICAL SCHOOL OF CAMBRIDGE.

By GEORGE MURRAY HUMPHRY, Esq., Downing
College, Surgeon to Addenbrooke's Hospital.

LECTURE VIII.

EFFECTS OF INFLAMMATION ON THE TISSUES: ULCERATION.

Atrophy from Inflammation, probably in part dependent directly on the Inflammatory Process, though seldom entirely so: Softening, sometimes the only evidence of Inflammation discoverable after death,—not the mere result of œdema, or of impaired nutrition, but a direct effect of Inflammation; Softening from other causes. Cases in which Softening from Inflammation most quickly occurs; Chronic softening, Yielding of Bones, Ligaments, &c.; Interstitial Absorption witnessed in Bones and Cartilages.—Ulceration, nature of the process; its difference from Suppuration; Healing by Granulation, Cicatrization, and Contraction; advantages and disadvantages of the latter; Peculiarity of Ulcers in the Cornea, and in Cartilage; Classification of Ulcers into Inflammatory, Phagedenic, and Atonic; Inflammatory Ulcers, proportionate in their progress to the Accompanying Inflammation; may be Acute or Chronic; Acute Ulcers; Chronic Ulcers; causes of their frequent occurrence in the Skin of the Legs, their General Characters and Treatment; their frequent Relation to Disordered state of Constitution; Ulcers under Thickened Cuticle.

The destructive effects of inflammation are most quickly produced, and are most marked in those tissues which are endued with the greatest vascularity and delicacy of structure, such as the nervous centres, the internal organs, mucous membranes and the skin; and, secondly, in those tissues whose vitality is naturally low, such as the fibrous membranes and bone, or whose nutritive and reparative energies have been reduced by some former disease or accident. They are most marked in corresponding ages and habits of body, that is to say, in infants, and persons of excessive fineness and delicacy of physical formation on the one hand, and in the aged, the debilitated, or the infirm on the other. They consist of atrophy, softening, interstitial absorption, ulceration, and mortification.

The first of these, atrophy, we cannot often distinctly attribute to the direct and unassisted agency of inflammation; for inflammation is so commonly associated with suspension of function, and so quickly produces other alterations of structure, which in their turn affect the nutrition of the part, that we are generally obliged to refer to a combination of causes the atrophy attendant upon the inflammatory process. Thus, atrophy of the eyeball sometimes follows deep seated inflammation of the organ, but it takes place only when the internal tunics of the eye have been so changed as to destroy vision. The wasting of the testicle, occasionally resulting from hernia humoralis and other inflammatory affections, is probably always associated with an impervious condition of the vas deferens, or of the tubes of the epididymis and rete testis; and a shrunken state of a liver or kidney which has been long subject to inflammation, seems to result in great measure from the pressure exerted upon the structure of the organ by the contracting lymph effused into its substance, or deposited on its exterior. Indeed, the atrophy consequent on inflammation is so generally associated with some other structural change or variation of function, which may be regarded as the direct cause of it, that I can scarcely adduce to you a fair instance of inflammatory atrophy strictly so called, unless we reckon as such some of the cases presently to be mentioned, in which interstitial absorption has taken place in inflamed cartilages and bones. Nevertheless, it is probable that atrophy from suspension of function, effusion of lymph, and other causes, takes place most rapidly when the organ affected is or has been the seat of inflammation; and we may remark, that wasting of the eyeball does not follow the loss of vision occasioned by opacity of the cornea, unless the deeper tissues of the eye have been inflamed. Moreover, diminution of size, and imperfection of structure, are such frequent results of inflammation, and are so closely connected with it that we can scarcely fail to admit, though it may not be easy to prove it unequivocally, that an impairment of nutrition, or atrophy, is one of the effects directly resulting from that modification of the nutritive processes which constitutes inflammation.

The first perceptible change which usually occurs in the texture of an inflamed part is owing to a diminution of the cohesive force of attraction between its component particles, and consists in a loosening or softening of its structure, so that it rends easily, and gives way under slight pressure of the fingers. We have frequent

opportunities of observing this change in the delicate internal organs when they have been the seat of inflammation, and sometimes it affords the only means of deciding the nature of the disease which has been going on during life. The other phenomena of inflammation may have passed away; the congested state of the vessels often subsides in the last hours of life, or, if congestion be found, we cannot always rely upon it as an evidence of inflammation, because it may have been occasioned by mechanical causes operating after death. But a softened condition of an organ, provided decomposition has not commenced, is a pretty sure sign that an inflammatory change has been going on. Some time ago, I examined the body of a lady who had died after a brief, but severe illness, during which, the prominent symptoms had been fever, with pain in the right hypochondrium, and the only trace of disease I could find was a softened condition of one part of the liver. Nearly one half of the organ was reduced almost to a diffuent pulp. There was no change of colour; no lymph or pus to be discovered; merely a softened state of the texture of the gland, and had it not been for this softening, it would have been impossible to discover the nature, or even the seat of the disease.

The state of softening is usually accompanied by the effusion of a preternatural quantity of serum, or some other product of inflammation, which, separating the fibres of the part affected, increases the softening, or rather, renders it more apparent. It must not on that account be supposed that softening depends merely upon the presence of an unusual quantity of fluid; for if it did, simple oedema would be sufficient to cause it. Something more than a mere variation in the amount of the fluid which moistens the tissue of an organ is necessary to occasion its softening. The imperfection or suspension of nutrition consequent on inflammation may in part account for it, especially in vascular and highly organized structures where the mutation of particles is rapid; but this is scarcely sufficient to explain the softening which is not uncommonly found in the harder organs, the bones, cartilages, and ligaments, where the function is of a passive nature, and the processes of waste and repair go on but slowly. There must be some other cause in operation to effect this change in the inflamed part, besides the presence of a preternatural quantity of fluid in its interstices, or the suspension of its function. There is, probably, in addition to these, some alteration in the vital and physical properties of the textures, directly resulting from, or associated with the inflammatory process, of a kind similar to that which, in the more severe stages of inflammation, gives rise to ulceration and mortification.

That softening of some organs, more particularly of the brain, may result from impaired nutrition, is shown by the cases in which it has been occasioned by a deficiency in the supply of blood. Thus, softening of one hemisphere of the brain is no uncommon sequence of a ligature of one carotid artery, and we lately examined a case in which softening of the medulla oblongata was attributable to the obstruction

of one vertebral artery at the point where it enters the cranial cavity, the other vertebral having been rendered impervious near its origin by disease at a former period. The paralysis of old people sometimes depends upon softening of a part of the brain, with a diseased condition of the arteries leading to it. It is well to bear in mind, also, that softening of the nervous centres may be occasioned by mechanical injury, and may closely resemble the softening which proceeds from inflammation or impaired nutrition. Indeed, it is often not possible to decide from which of these three causes (inflammation, impaired nutrition, or mechanical injury,) the softening of a brain or spinal cord proceeds.

In many persons who have passed the middle period of life, the textures become soft and flaccid. They yield easily to slight mechanical forces, so that a gentle blow will occasion a severe bruise. The heart's action becomes feeble, its walls thin and flaccid, perhaps fatty, and the pulse is irregular and unequal, sometimes intermitting. Such persons bear the remedies usually employed to combat inflammation, very indifferently; they are easily prostrated, and the effect of the disease in producing softening and destruction of the tissues is especially remarkable in them. The lady in whom the softening of the liver occurred, to which I just alluded, was of this temperament; she had indulged freely in the pleasures of the table, had been bled rather largely at the commencement of the attack, and all the organs were remarkable for the looseness of their texture and the ease with which they could be torn. I need not say that in other cases where there is a predisposition to softening from deficient supply of blood, or from mechanical injury, a slight degree of inflammation will be sufficient quickly to induce it.

We have frequent opportunities of observing another effect of softening when it takes place more slowly under the influence of chronic inflammation affecting the harder parts of the frame, in consequence of which they become weakened and rendered unfit for their mechanical functions. The bones, long subject to chronic inflammation, may bend beneath the weight of the body or under the pressure of surrounding muscles. Here are specimens of bones which have yielded in this manner. You observe in this tibia a sudden bend at the part where there is thickening, some ulceration, and other evidences of inflammation. This is a different disease from rickets, which generally affects the whole skeleton in a greater or less degree, and depends rather upon imperfection of the developmental processes, than upon disease occurring subsequently. In rickets, the bones do not acquire their proper strength with a rapidity proportionate to the growth of the rest of the frame, and therefore yield under the increasing weight of the body; but the affection we are now considering is due to the softening effects of inflammation operating, it may be, upon bones which have attained their full strength and size.

The ligaments suffer in the same manner as the bones, and when they have been for some time inflamed lose their tension and force of resistance. Hence, in some measure arises the looseness and sensation of weakness so often experienced in chronic inflammatory

affections of these parts. The relaxation and lengthening of ligaments thus weakened sometimes proceeds to such an extent, that they yield to the constant traction exerted upon them by the surrounding muscles or the weight of the limb, and may permit actual dislocation of a joint to take place. Here are specimens in which dislocation of the knee has ensued in the course of long-continued disease of the joint; the ligaments are all entire, but they have yielded so as to permit displacement to the extent you see. There are in the museum of St. Bartholomew's Hospital, some interesting specimens of lengthening of the capsule of the hip-joint, in one instance to such an extent, that the head of the thigh bone having escaped from the acetabulum rests upon the dorsum of the ilium. Some time ago there was a lad in this hospital in whom the same lengthening of the capsule of the joint appeared to have taken place during inflammation, for, though he was able to bear some weight upon the limb, the head of the thigh bone slipped in and out of the acetabulum. It occasioned him no pain and he rather enjoyed the exhibition of his new feat. We took a good deal of pains to provide an apparatus which should prevent the displacement when he walked, but I am not confident that we succeeded at last, and I have for some time lost sight of the boy. You may have observed, that in inflammation of the wrist joint, the muscles and tendons ceasing to brace the joint, and the ligaments becoming softened by the inflammation and yielding to the weight of the hand, which is usually kept in the prone position, the carpus, after a time sinks upon the pillow, and leaves the lower ends of the radius and ulna prominent on the dorsal aspect of the limb. This relaxation of the ligaments and consequent displacement of the articular surfaces in cases of severe and long-continued disease of a joint, is no infrequent event, and unless you were acquainted with the real nature of the change you might imagine that ulceration or destruction of the ligaments had taken place. Surgeons who are not in the habit of dissecting these cases often assert that the ligaments of a joint are gone, but you will generally find upon examination, even where very great displacement has taken place, that the ligaments though stretched are entire. I speak more particularly of the knee and wrist joints, for in the other instance in which much displacement occurs in the course of disease,—viz., the hip, the capsule of the joint is usually ulcerated through before the head of the thigh bone and escapes from the acetabulum.

The staphylomatous bulgings of the cornea and sclerotic occasionally following long-continued inflammation of those tunics, are in like manner due to this softening influence of the disease, which weakens and renders them unable to support the pressure of the aqueous and vitreous humours.

Another effect of inflammation is interstitial absorption, which is nearly allied to softening, and occupies an intermediate position between it and ulceration. By this process the parts covering an abscess and intervening between it and the surface are removed, as I before explained to you; and the rapidity with which

an abscess advances to the surface, is proportionate to the acuteness of the attendant inflammation. The effects of interstitial absorption are most evident in the bones, because in consequence of the hardness of their texture, the vacancies occasioned by it do not so easily escape observation. Thus we often find bones becoming preternaturally porous under inflammation, and sometimes they are rendered so delicate as well as soft, that a scalpel may be passed through them without turning its edge. In this specimen of an inflamed thigh bone the cancellous texture has been entirely removed from the interior of the shaft, and the same change is commonly found to have occurred in the sequestra of necrosis. In the bones lying on the table, the outer compact walls of the shafts have been rendered porous and rough, so as to look as if they had been worm eaten; and the new bony deposit which has taken place on their circumference has been run into some of these holes and crevices while it was in a soft and fluid state, and solidifying there, has acquired a firm connection with the old bone. The reunion of broken bones is in like manner effected by a slight degree of inflammation, followed by interstitial absorption and roughening of the fractured ends, at the same time that a new cementing material or callus is poured in between and around the surfaces thus prepared for it. The cement is in this manner intimately blended with each of the broken ends, and concreting or ossifying, forms a firm bond of union between them. The transverse connecting rivets uniting the laminae of an inflamed bone may also be absorbed, and the laminae themselves may be separated from one another by the effusion of serum or lymph between them. These interposed products becoming afterwards ossified occasion induration and permanent thickening of the bone.

The interstitial absorption, consequent on inflammation, may also occasion the removal of the cartilages, and may alter the shape of the articular ends of bones. The gradual destruction of cartilages and the strange distortions which the hip and other joints undergo in the course of chronic rheumatism are remarkable examples of this. Recent lymph formations are particularly liable to this effect of inflammation, and so are parts already predisposed to interstitial absorption by a deficient supply of blood or a failure of the nutritive powers, such as the bones of old people. I am at this time attending a man, aged 86, whose humerus snapped in the middle as he laid old of a friend to help him to walk up stairs. For some weeks previously he had complained of pain in this part of the arm, and it is probable that some slight inflammatory attack, weakening and causing absorption of the bone, was the immediate cause of the accident.*

If the same influence which engenders softening

* This old man is since dead. The humerus was light, porous, and fragile; no attempt at reparation had taken place; the broken ends were rough and worm eaten on the surface for some distance above and below the fracture. This condition of the ends of the bone was probably due to the inflammation consequent on the injury, which was soon followed by its destructive results, but failed altogether to induce any reparative effects.

and interstitial absorption be exerted in a severer form it will, on a surface, occasion an actual breach or solution of continuity—in other words, it will give rise to an ulcer. The process of ulceration consists in the diminution of the cohesive force of the tissues at the part affected, to such an extent that they are disintegrated, and particle after particle becoming detached, pass off with the serous ingredients of the blood effused among them and constitute the discharge. Some of the atoms of the ulcerating tissues are, no doubt, returned into the circulating current in the same manner as in interstitial absorption, but a considerable quantity of dissevered fragments escape with the discharge, and beneath the dirty serous fluid which moistens a spreading ulcer, may be seen a thin layer of greyish or dark, or otherwise discoloured tissue in process of disorganization. We may, therefore, regard ulceration as the progressive or atomic death of a tissue occasioned by inflammation. It is not dependent simply on the arrest of nutrition, but it is the result of some destructive influence directly resulting from the inflammatory process, whereby a premature dissolution and disintegration of tissue is engendered.

You will perceive that ulceration does not depend any more than nutrition upon a peculiar action of the vessels of the part; it may take place in the same manner as the other effects of inflammation, in textures which are scantily supplied with vessels, or entirely devoid of them,—for instance, in cartilage, and in the cornea; neither is it the result of the erosive influence of a particular fluid, generated by the inflammatory process, for there is no evidence of the existence of any such fluid; it consists merely in the molecular death and separation of the components of the structure, in consequence of some direct influence on their vitality exerted by inflammation. Hence it follows that parts which, in consequence of the feeble state of their vital powers, can least resist the disturbing influence of inflammation, are most prone to fall into ulceration, and we are thus able to explain the frequent occurrence of ulcers, in feeble and emaciated persons, on the lower extremities, and on parts which have been weakened by injury or disease.

The processes of suppuration and ulceration are evidently very different, inasmuch as the former depends upon a change being wrought in the particles of the blood effused among the tissues, of such a nature that they cohere together into little masses called pus-globules, which have no ability to undergo any further organization, and therefore act as foreign bodies; whereas ulceration consists in the premature death and separation of the molecules of the tissues, whereby a solution of continuity is effected. Though suppuration very commonly follows ulceration, the two seldom proceed together at the same spot, so seldom, indeed, that the formation of pus is a pretty sure sign that an ulcer has ceased to spread. The cases in which an ulcer heals in one direction, and spreads in another, do not constitute an exception to this statement, because even in them ulceration and suppuration do not go on together at the same part of the ulcer.

So long as an ulcer continues to increase its margin

is sinuous and uneven, and its surface is foul, ragged, and covered with the disorganized remains of dead and decomposing tissues, fragments of which, mixed with the serum, constitute the discharge. The first sign of improvement, and of the cessation of the ulceration, is a [diminution of this foul dirty covering,—a cleaning of the ulcer as it is called. The exposed surface of the ulcer becomes red, and some pus-globules are intermixed with the discharge. The reparative processes next commence with the formation of granulations over the surface of the ulcer. These are composed of lymph, organized and vascular; they form at the bottom and sides of the ulcer, fill up its cavity, and reach, or even sprout, beyond the level of the surrounding skin; at the same time the margin of the ulcer which had previously been jagged, becomes even, and the size of the ulcer begins to be diminished by the contraction of the granulation structure forming on its surface. This latter change takes place in accordance with that contractile property of lymph which I have so frequently alluded to.

The granulations are of pointed and conical shape, and being set closely together at their bases, they give to the surface of the ulcer an uneven granular appearance. As soon as they have reached the level of the skin, and sometimes before, the granulations which are in immediate contact with the skin become gradually converted into a structure called cicatrix, having a resemblance to the cutis, and bearing a cuticle upon its surface; it seems as though a fine, delicate, reddish pellicle were projected from the skin over the granulations, and this pellicle gradually advances towards the middle of the ulcer, till at length the whole is covered by it, or healed.

While the surface of the ulcer is thus closed in by cicatrix, its size continues to be diminished by the contraction of the healing medium, and this property of contraction exists in the cicatrix no less than in the granulations that precede it. It is by the combined influence, therefore, of these two forces, contraction and cicatrization, that an ulcer is healed. The share which each of them has in the cure varies according to circumstances. Where the surrounding textures are loose and unadherent, the ulcer is quickly diminished by the contraction of its granulations, and the cicatrix is small in proportion to the size of the gap which has been closed. Where, on the contrary, the surrounding textures are tough and resisting, or the skin fixed to the parts beneath by adhesions or other cause, contraction can take place to a less extent; the healing must be in greater measure effected by cicatrization, and is proportionately slow. The closure of the last or middle part of a large ulcer is always very tedious; partly because contraction has taken place nearly to its full extent, and can offer but little further assistance towards the completion of the cure, and partly because the reparative work of cicatrization is languidly accomplished in proportion to the distance from the point at which it commenced. It has been already remarked that the fibrin of delicate and scrofulous persons, though deficient in contractile power, quickly admits of organization, and you may have observed how little

the ulcers of these persons are closed by contraction, but that, nevertheless, they sometimes skin over very rapidly—in an imperfect and unsound manner, I grant—for the cicatrices thus quickly formed are large, weak, and very liable to ulcerate again.

The new medium by which an ulcer is closed is always inferior in vital, as well as in physical, qualities, to the texture whose place it occupies. The contraction of an ulcer has, therefore, this very important advantage, that by diminishing the gap it renders a smaller surface of the new medium requisite. Some comparatively slight disadvantages, it is true, result from it, such as the formation of strictures, the unsightly puckering of integuments, and even the distortion of limbs. These evil consequences are, however, only occasional, and are not sufficiently frequent to counter balance those good effects of contraction, the influence of which is universal. The disposition to contract often continues for a considerable period after the complete healing of the ulcer, but it diminishes gradually, and altogether ceases after a time, when the cicatrix becomes soft, supple, and paler even than the surrounding skin.

The indisposition of parts to heal is, no less than their liability to ulcerate, proportionate to the feeble state of their vital energies; hence the difficulty of curing ulcers on the lower extremities of old people, and on limbs, where, in consequence of a varicose condition of the veins, the circulation is sluggishly conducted. Hence, too, the ulcers occurring on a limb which has been weakened by disease or injury are very troublesome, and the sores occasioned by unequal pressure upon a broken limb are often particularly so; for a limb which has been so severely injured, and has been, in addition, kept for some time in a constrained position, is long in recovering its natural force of nutrition, as well as its proper physical powers. Your recollection will supply numerous instances of the slow healing of ulcers under similar circumstances, such as the bed-sores, occurring in emaciated persons, and the ulcers on paralysed limbs. We fear to make incisions into the œdematous legs of the dropsical patient, because we know that tedious ulcers, if not mortification, are likely to be the result of such meddlesome surgery.

The cornea, and the cartilages covering the articular ends of bones, differ from most other tissues in the density and toughness of their structure, and more particularly in being in their natural state destitute of blood-vessels. Each of these tissues is also subject to a peculiar kind of ulceration. The acute ulcer of the cornea corresponds with ulcers in other parts. It has a flocculent grey surface, and the clearing of the dirty opaque coating from the ulcer is a sign that the disease has been arrested. But the peculiar ulcer of the cornea to which I wish to direct your attention is of slow formation, not attended with much inflammation, and quite clear and transparent, so that it is very likely to escape observation. A child is brought to you who is observed to avoid the light, perhaps to cry at times with pain in one eye, which waters, and is kept partially closed. You notice some redness of the conjunctiva, and finding no other disease upon a slight inspection,

regard the case as of little importance. No improvement being derived from your prescriptions, you are induced to examine the eye more carefully, when you discover a slight inequality in the surface of the cornea; it looks as if a thin slice had been planed off at one part, or there may be a little indentation as if a small semicircular piece had been chiselled out with a sharp instrument. Such ulcers are of common occurrence, though they often escape observation. They continue sometimes for a considerable period, penetrating deeply into the cornea, and resisting the ordinary remedies used for inflammation of the eyes, I believe the best local application to be a strong solution of nitrate of silver, placed upon the ulcer with a camel-hair brush. When they are healing, these ulcers become slightly opaque, and their cicatrices resemble those of ordinary ulcers.

The acute ulcers of articular cartilage are, like those of the cornea and other parts, uneven and roughened by the fragments of tissue which are being loosened from it and dislodged piecemeal. There is, however, a chronic ulcer of cartilage corresponding with the state of the cornea just described, in which the particles of the tissue seem to be separated in very minute fragments, as well as slowly, so that no distinct layer of them in a disintegrated state can be seen upon the ulcer. At any rate, the surface of the ulcer is quite clear, and it looks as if a portion had been sliced off from the cartilage, or scooped out from it with a sharp instrument. These ulcers are found combined with the acute ulcers in amputated joints, and they sometimes exist alone. I have seen similar ulcers upon the opaque indurated wall of an ovarian cyst, and upon a vagina which had been long subject to inflammation.

The healing of ulcers in the cornea, and in cartilage, probably takes place without suppuration, and without the formation of that structure intermediate between lymph and cicatrix, which we call granulation. It appears that the lymph shed upon the surface of the ulcer is at once converted into a toughish opaque fibrous substance, which fills up the little chinks in the chasm, and forms the cicatrix.

All ulcers are, probably, more or less directly dependent on inflammation, and most of them are, in the rate and extent of their progress, proportionate to the severity of the inflammation which induces them. Some are more rapid in their increase than the attendant inflammation is sufficient to explain, and the disproportion between the cause and effect seems to depend upon some peculiarity in the ulcerating process. In others, again, the disproportionate rapidity of the ulceration depends upon a want of proper resisting power in the tissues to withstand the destructive tendencies of the inflammatory process. These three conditions enable us to group the various ulcers which fall under our notice into three great classes. The first we will call the inflammatory; the second, the phagedenic; and the third, the atonic.

Of the inflammatory ulcers some are acute and some are chronic, but all are dependent on the surrounding inflammation for the rate of their progress, and are proportionate to it; and, in the treatment of them, we

rely almost entirely upon measures calculated to reduce the inflammation. Of all the different varieties of ulcer the acute inflammatory is the simplest and most manageable; it commences at the point where the inflammation is most acute with a small blister or pustule, which, bursting, leaves an abrasion of surface or an ulcer. The ulcer continues to increase so long as the surrounding inflammation remains unabated. As soon as the inflammation subsides under the antiphlogistic regimen, with rest, and the application of fomentation or poultice to the part, the ulcer begins to clear, assumes a healthy aspect, and generally heals up quickly. In some particular cases, leeches, or even general bleeding, may be required. I would advise you not to apply the leeches upon the inflamed integuments surrounding the ulcer; they will do more good if placed at a greater distance, and the leech bites are less likely to be troublesome. These acute inflammatory ulcers are often the results of injury,—a contusion, abrasion, or laceration of the integuments, which is followed by inflammation and ulceration. They are frequently observed in healthy persons, and, for the most part, yield readily to appropriate treatment.

In chronic inflammatory ulcers, the ulceration and the attendant inflammation are slow in their progress, often remaining stationary, or advancing but little for months, so that the surrounding integuments and other structures become altered in colour, indurated, and adherent together, from the deposit of lymph into and between them. These changes may extend deeply into the limb, causing thickening of the bones, and adhesions of tendons to their sheaths. Chronic ulcers are sometimes the remnants of acute ulcers, or the consequence of neglected wounds, but very frequently they owe their existence to some disordered state of the constitution. They are most commonly met with in persons who have attained or passed the middle period of life, are far more frequent in the lower extremities than in other parts of the body, and they are often associated with a varicose state of the cutaneous or subcutaneous veins.

The liability of the lower extremities to ulcers and other chronic inflammatory affections, is, no doubt, dependent upon their comparatively imperfect organization and the proportionate languor of their circulation. It may be also, in some measure, related to the fact that they are in their development behind most of the other parts of the body, for, as a general rule, parts which are last developed are the first to fail. The decay of the body is foreshadowed by that of the teeth, the wisdom teeth being first, and the incisors last to go. The senile death of the lower extremities sometimes precedes that of the rest of the body by a considerable period, and we cannot wonder that parts which are thus at a comparative disadvantage, both as regards development and nutrition, should often suffer from the destructive effects of inflammation.

The relative facility with which the supply of blood is conveyed to the different parts of the body may be demonstrated by injecting the arteries of the dead subject from the thoracic aorta, as it is usually done preparatory to dissection. The injection first finds its way into the arteries of the trunk, head, and face, then

into the upper extremities; and it reaches the legs and feet last of all, and with the greatest difficulty. This comparative disadvantage with regard to the distribution of the blood, associated as it is with deficiency of nutritive force, must increase the liability of the lower extremities to inflammatory attacks and must render them inferior to other parts in the power of resisting the destructive effects of inflammation, as well as inferior in the ability to repair the breaches caused by inflammation and other causes.

Again, the ulcers on the legs are often associated with varix of the saphena and other veins—a condition which still further impedes the circulation through the integuments, at the same time that the distended and tortuous veins are a perpetual source of irritation, frequently exciting inflammation, and therefore directly predisposing to ulceration. These various causes,—viz., the late development and imperfect nutritive energies, the natural languor of the circulation, increased as it often is by a varicose state of the veins together with much exposure to injury, combine to render the lower extremities, particularly the skin of the legs, so much more susceptible of chronic ulceration than other parts, that, in its simple form, it is an affection almost peculiar to them. We very seldom see a chronic ulcer in the head, trunk, or upper extremities except it be of specific nature, or in a scrofulous patient.

These chronic ulcers of the legs form a considerable proportion of the cases admitted into our hospitals, and they present a great variety of appearances. The most characteristic features are an oval or circular shape, an excavated, dirty, grey surface, mottled with small reddish spots, and surrounded by raised indurated integuments which, at the margin of the ulcer, are often covered by a thick, soft, white layer of cuticle. These ulcers commonly furnish a large quantity of thin dirty fluid. The leg is generally oedematous, especially if the patient continue to walk about upon it, and the veins are frequently varicose, either in their minute cutaneous ramifications, or in the larger trunks which pass beneath the skin, and not infrequently in both situations. Sometimes the ulcers are covered with large, pale, flabby granulations, which reach or exceed the level of the surrounding skin; the discharge is, in such cases, also copious, and the integuments for some distance round the ulcer are bluish or livid. At other times the ulcer is more painful, its surface red, its circumference angry and irritable, and the discharge is red. It is useless to attempt a description of the various appearances these ulcers present, for scarcely any two are alike. They are confessedly tedious troublesome cases to manage, and you will see various means of treatment employed. We generally place the patient in the recumbent posture, and apply poultices to the part till the surrounding inflammation is abated, and the surface of the ulcer cleaned from the foul discharge and the dirty substance which usually covers it; afterwards water-dressing is employed, or stimulating lotions, if the ulcer be languid in appearance and progress. Pressure by means of a bandage, or with circular strips of adhesive plaster carefully applied, is sometimes very serviceable. The good effects of strap-

ping are especially observed when the ulcer is callous, as it is called,—that is to say when its edge is raised, indurated, and white. You will be surprised to see how quickly ulcers of long standing will sometimes heal up under moderate pressure, with well applied strips of plaster. The great success attending the employment of this plan of treatment in some cases has led to its indiscriminate adoption, and has necessarily caused it to fall into some disrepute. It does not answer when the ulcer is angry, or the surrounding integuments red and irritable. The emplastrum plumbi spread on calico may be sometimes advantageously substituted, when the skin is likely to be fretted by the resin of the emplastrum adhesivum. It is not always necessary to keep the patient in bed while under this treatment; indeed, the exercise of the limb and of the body may occasionally assist in the cure.

When the ulcer is angry, irritable, and painful, and the patient restless and unable to sleep, great benefit is often derived from the employment of opium, in doses of half a grain or a grain, given two or three times a day. If the surrounding integuments be adherent to the subjacent parts, and shiny from former inflammation or ulceration, the cure has to be effected by cicatrization alone, unaided by contraction,—is consequently very tedious, and the case is most unsatisfactory, because the ulcer is sure to break out again as soon as the patient walks upon the limb.

An ulcer which has shown little disposition to heal, will sometimes close up rapidly after an attack of erysipelas, or any other illness; and the sudden healing of an ulcer which has lasted for a long time is very likely to be followed by some other disease,—a cutaneous eruption, indigestion, or even apoplexy. When you inquire into the history of a chronic ulcer, you will often find that it was preceded by some disorder of the health, which subsided upon its appearance; and, if the ulcer has been at any time healed, the patient will often state that during that period he felt unwell, suffered under easy sinking sensations at the pit of the stomach, diarrhoea, loaded condition of the urine, loss of appetite, indigestion, giddiness, or some other disorder of the system. Sometimes the ulcers occur in women at the time of the cessation of the catamenia, and are a substitute for the flushings and other ailments often attendant upon that change. It is the more important to inquire into the particulars of all these cases, because during the time that the patient is under treatment, on account of the ulcer, these various constitutional symptoms are not generally present, and we are, therefore, likely to fall into the error of regarding the ulcer as the only ailment, and to imagine that in healing it we are curing our patient.

Attention to the constitutional symptoms forms, therefore, an important item in the treatment of chronic ulcers, and you should consider, not merely those symptoms which exist at the time, but those also which preceded the ulcer, and those which, from your observation of the patient's constitution, are likely to follow if it be closed. The particular course to be adopted in reference to these symptoms must vary with the circumstances. When the ulcer is of long standing, it is not

wise to close it up completely, for no course of general treatment can ensure your patient against the occurrence of some other disease. Even the imitation of the plan which nature has adopted,—viz., the furnishing a vent by means of a seton or issue answers but imperfectly, and the patient is often content to bear an ailment which has become habitual, rather than encounter a new disease under the name of a remedy.

A very troublesome ulcer with indolent, granular, or warty surface sometimes forms under the cuticle of the fingers, or palm of the hand, where it has been thickened by pressure, or under a corn upon the sole of the foot or at the heel. The only plan of treating these cases which I have found effectual has been, after paring away the thickened cuticle, to apply nitric acid to the surface of the ulcer, so as to destroy the warty structure, and present a fresh surface, upon which the healing processes may do their work.

ON THE TREATMENT OF HERNIA WITH OPIUM.

By BUTLER LANE, M.D., M.R.C.S.E., Ewell.

In the *Provincial Journal* of April 21st, 1847, I published a paper advocating the treatment of hernia with opium, and I now again take an opportunity of adverting to the subject, with the view to urge my professional brethren to give a more general trial to this simple and efficacious mode of treatment. The striking case related by Mr. Mayo, of Winchester, in the *Journal* of June 16th, 1847, and the editorial reference to other cases successfully treated by the opiate plan, I hoped would have elicited some further communications. Such, however, has not been the case, but if those who have given the opiate treatment a trial, whether successfully or unsuccessfully, would inform me on the subject, I should be happy to embody the results of their experience for the general advantage.

Since my former communication the two following cases have occurred to me:—The first was one of inguinal rupture in a young man. On a former occasion, some months previously, I had reduced it with some little trouble, but now, from over exertion in bell ringing, it was forced down into the scrotum, and presented the volume of a small orange, firm and elastic to the touch, and affording the usual impulse on coughing. The taxis failed in its reduction, as also did the application of cold. There was then no sickness, and the pulse was quiet. An aperient was given, and the bowels were relieved, but, as I doubted whether action had taken place through the entire course of the alvine canal, it was repeated. The second dose operated three times, and caused much burning stinging pain in and at the neck of the tumour. It was thus evident that the hernia was incarcerated, but not yet strangulated. The next day the tumour was found the same. An attempt at reduction was again made by myself, and subsequently by my friend Mr. Allan, of Epsom, without success. Towards evening some

symptoms of constitutional irritation became manifest, —viz., accelerated pulse, dark-coloured vomiting, with local and general abdominal pain and tenderness. No further action of the bowels had taken place. Opium was now resorted to in grain doses every hour, and by the time the man had taken six doses he was powerfully narcotized. Still the hernia was not returnable, though all pain had disappeared. A castor-oil enema was thrown up the rectum with an œsophagus tube, but after some time it returned untinged with fecal matter. The stomach being no longer irritable, it was thought desirable to administer a mild aperient draught, and leave the patient for the night. On an early visit the following morning, all trace of the tumour had disappeared, though how or when, the patient was quite unconscious. The bowels were relieved soon after, but so strong was the opiate influence, that I believe the man slept almost incessantly for the next twenty-four hours.

The second case was that of a shepherd, who had trained himself in managing some sheep. On the left side I found an old irreducible and painless inguinal hernia; on the right side was a smaller femoral one, about the bulk of a small egg, which, according to his own account, had not been reduced for a month or two, but was now increased to double its original size by the injury which he had received two hours previously to my seeing him. He had made many ineffectual attempts to reduce the rupture, and I also failed with the taxis. The tumour was tender, painful, and very tense; the entire abdominal surface was also painful and acutely sensitive to the slightest pressure. There was nausea and retching. Being called away suddenly, I placed two grains of powdered opium, with the same of calomel, on the man's tongue, and left him on his back. On my return, in three-quarters of an hour, I found that the hernia had wholly disappeared, and that my patient was quite relieved. He told me that after I had left him about fifteen minutes, he began to feel easier, and experienced a gurgling and rumbling in the bowels. He then made moderate pressure on the tumour, and it quickly disappeared.

I have also been favoured with the narration of a case which occurred in the practice of Dr. Thorn, of the Harrow Road, Paddington, of which that gentleman ascribes the successful issue to the adoption of my recommendation of the *opiate treatment*. It was a case of inguinal hernia, occurring in an old lady, aged 68, who obstinately refused the application of the taxis and other appropriate means. There was obstinate constipation, which had existed ten days; the vomiting was also stercoraceous; there was hiccough and intermitting pulse. Purgatives and other medicines were useless, and she seemed fast sinking into a state of collapse. Tincture of opium was then resorted to; and half an ounce was given in small and gradually increased doses, at intervals of two hours. With this she rallied, becoming more comfortable and easy, and an enema brought away a quantity of feculent matter, with blood and membranous substance. Pain and sickness still continued, probably from the supervention of inflammatory

action; but, with the sanction of Professor Fergusson, the opiate treatment was persisted in, combining calomel with Pulvis. Opii. Sixteen grain doses of the opium were given, with double the quantity of calomel, at intervals of two hours. Subsequently half an ounce more laudanum was administered, in moderate doses, and a further quantity of opium, with calomel, was rendered necessary, by a subsequent attack of enteritis. The patient is now in health, and, as Dr. Thorn emphatically remarks, remains "*a living testimony of the efficacy of opium.*" The case is certainly a remarkable instance of bold and successful practice.

The advantage to be derived from the administration of opium in hernial cases, may, I believe, be regarded as two-fold. Firstly, in subduing the general and local irritation, it will materially augment the chance of reduction; secondly, should it finally be necessary to resort to the operation, I am confident that the treatment in question will place the patient in the condition most favourable for the performance thereof, more or less anticipating and preventing the constitutional disturbance which would be liable to occur. The partially anæsthetic condition, as we may term it, which is instituted by the administration of opium, is of a decidedly genial character, tending rather to promote than depress the vital powers, a fact well illustrated by Dr. Thorn's case, and which indeed must be familiar to all practical men. In the first of the cases which I narrated in my former paper, the conversion of a state of almost mortal collapse into one of happy inebriety was most striking, and in a case which I believe will shortly be brought under the notice of the readers of this Journal, wherein the operation was necessitated after the opiate treatment had been resorted to, I have been informed that the insusceptibility of the patient to constitutional irritation was remarkable, even though subsequent mortification of the gut took place, occasioning the temporary formation of an artificial anus. It may be made a question, whether there is no risk of masking the acute symptoms of strangulated hernia, and thereby causing the operation to be delayed, to the material diminution of its probable success. Now, to those cases where the operation is obstinately refused, this argument will not apply, inasmuch as the opiate treatment may be regarded as a compulsory alternative; and I feel convinced that as a general rule, even in other cases, where an operation would readily be submitted to, no advantage would be lost by giving the opiate treatment a due trial. A greater delay than it would require, is often at present accorded, without even a rational prospect of relief, and without the constitutional benefit being realized, which I anticipate from the the opiate treatment. Supposing the necessity of an operation is somewhat urgent in the judgment of the surgeon, I cannot believe that a dread of masking symptoms need deter him from administering opium; no man would be justified in knifing a case without the previous trial of some milder means; therefore let him fix the latest minute to which he deems the operation may be deferred, and if, when the hour of grace has expired, the administration of opium,

simply or in combination with other remedial measures, shall have afforded no *essential relief*, then let him be "*bloody, bold, and resolute.*" I should not deem either abatement of pain or arrest of vomiting, individually, to constitute *essential relief* in themselves, but if the subdual of those two distressing symptoms were combined with considerable constitutional relief, (I do not mean narcotic stupor,) then, although defecation should have taken place, some further delay would surely be justifiable.

I will not further trespass on the valuable columns of our Journal, but trust that what I have written may induce some of those to whom the field of surgical experience is more widely open than to myself, to give a trial to the opiate treatment, fairly examine its merits, and faithfully report the results of extended experience.

Ewell, Surrey, May 1, 1849.

ON THE

USE OF THE EXTRACTUM COTYLEDONIS UMBILICI IN EPILEPSY.

By JOSEPH BULLAR, M.D., Southampton.

The large number of epileptics who are not treated at all, is one of the strongest proofs of the insufficiency of our present means, and the best apology for bringing forward a new remedy, and as this remedy is an indigenous plant which is now in full leaf, and grows plentifully in many parts of England, many of the members of our Association may be induced to try it. I will, therefore, shortly state my experience.

Several years ago the expressed juice of the cotyledon umbilicus or napplewort was recommended to a lady who had compound epilepsy, which had not yielded to medical treatment, and under its use the disease was entirely removed and has not returned. The patient was under the care of my friend Mr. Salter, of Poole, who watched the case with much interest, and mentioned the fact to me. Subsequently, my brother, Dr. W. Bullar, recommended the juice for a child in this neighbourhood, where the plant grew, and the epilepsy was cured. Rather more than a year ago I requested Mr. Randall, chemist, of Southampton, to prepare an extract of the expressed juice, in order to give the remedy a trial, and from the experience I have since had, I have no doubt in my own mind of the anti-epileptic power of the medicine, although sufficient time has not yet passed to bring forward cases as perfect cures. Mr. Salter, having, however, published the case just mentioned, in the *Medical Gazette*, and alluded to the use which I have made of the extract, which has interested many, I am rather anxious to state what results may be fairly expected, in order to prevent disappointment to those who may use it.

From the experience I have had in a considerable number of cases, (several of which were of a very hope-

less kind,) long perseverance is necessary, and if the number and violence of the fits are lessened, there are good grounds for hope and further perseverance. In all the cases there has been a marked diminution in the violence and frequency of the attacks; and as, in two cases, (one of which I heard to-day,) it has first increased the violence of the fit, and as in others there have been transient symptoms of increased nervousness and headache, requiring a short suspension, I am in hopes that it may prove a true anti-epileptic. It is certainly in many cases nervo-tonic, as the improved nervous tone is shown by quieter sleep, fewer dreams, better spirits, more ability to take exercise, and a consciousness of general improvement. It has no other action on the body that I am aware of. It certainly produces no action on the bowels, for when there has been costiveness (which is so commonly the case in epileptics) the usual medicines to keep up a natural action have been required. I have used it with the precautions quinine requires in ague, attending to the general health, and endeavouring to remove and rectify faulty secretions, or any obvious local disorder. Some of the patients to whom I have given it have been in fair bodily health; in others the nervous system has been weak and excitable; in others weak and exhausted. In children it is advisable to begin with a few brisk purgatives, in case the epilepsy may depend on worms; and in young men the state of the urethra should be examined, as that state of debility kept up by seminal discharges, consequent on an irritable urethra, which so disposes the system to epilepsy, counteracts the beneficial influence of the medicine. If there is habitual costiveness, a simple dinner pill (as the compound rhubarb,) is necessary. When, with an excitable nervous system, there is a foul tongue, yellowish eye, turbid acid urine, and offensive motions, the state of the blood on which this depends must be corrected by a course of aperients, which excite the gastro-intestinal mucous membrane, liver, and kidneys, to throw off the impurities, without weakening the general powers, (aided by diet and hygienic means,) for unless the fluids are thus filtered and purified, no specific remedy can with any reason be expected to have a fair chance. I will briefly relate two cases which have impressed me strongly with the powers of the medicine, and the importance of steady perseverance.

One of these patients had been epileptic for some years; she was of an excitable nervous system, and had suffered much anxiety. During the year which preceded the use of the cotyledon, she had attacks of epilepsy every three weeks, the attacks consisting of eight or nine fits, lasting from twelve to twenty-four hours. She has, with few intervals, taken the cotyledon since April 1848, and she has had but one fit during the last seven months, and that a slight one. Her health was improved.

The second was a younger woman, about 22, who had been epileptic since she was six years old. She was muscularly strong, and her general health good, except costiveness, and slight leucorrhœa. The fits occurred once or twice a week, occasionally (but rarely)

there was an interval of three weeks. No remedies had been of any use. She began to take the extract in April, and continued it until October, with a few intermissions. The fits had become very few, and more like short fainting fits, in which she did not lose her consciousness. In November she went to France, and I learned a fortnight ago that she had had but two of these slight fainting fits since, and six months have elapsed.

Now, neither of these cases can be strictly said to be cured, the fits may return, but yet they are sufficient evidence to justify perseverance in other cases; for epilepsy does not wear itself out, but wears out the brain and the mind.

Through the kindness of the attendant surgeon I had an opportunity last year of trying the extract of cotyledon in five patients who were incarcerated for life in the workhouse, on account of epilepsy; they had been epileptic for 5, 8, 12, 30, and 58 years, and in all, the mind was weakened. I did not persevere more than three months, as the attacks, though fewer, still returned. Subsequent experience having shewn me that much greater perseverance was necessary, I examined the notes of these cases, and found on comparing the difference between the number of fits which the patients had before the use of the extract, and those which occurred during its employment, so striking a diminution as to supply confirmative evidence of its power.

The juice is prepared by bruising the leaves and leaf-stalks in a mortar, and expressing the juice from the bruised mass through a cloth. One teaspoonful twice a day of the juice. I have prescribed five grains of the extract, (which is made by evaporating this juice,) twice a day, and occasionally three times. It may happen that the disease may be much shortened by increasing the dose. This is matter for further trial. With a new remedy I have been cautious.

The cotyledon umbilicus grows very abundantly in Great Britain and Ireland; it is now in full leaf. It grows in Hampshire and Dorsetshire, on road-side banks and on stone walls. It has a thick, fleshy, light-green leaf, almost circular, with its fleshy foot-stalk inserted in the centre of the leaf, so as to give it a shallow cup-like or umbilicated depression. I have heard of it as matlock, in North and South Wales, and at Ilfracombe. Mr. Jones was kind enough to send me a considerable quantity from Jersey. The friends of a lady, (who is now taking it in Dublin,) have found it abundantly near that city, where the poor use it as poultices. Professor Balfour, of Edinburgh, tells me that he has gathered it in many places on the west coast of Scotland, and near Galway, in Ireland, as well as in England.

I should be very much obliged if any member of our Association, who may try this remedy, would favour me at some future time by sending the particulars of his cases, as I hope, when time has added confirmation to my experience, to communicate more in detail to the Society the results.

I cannot finish this communication without repeating that disappointment will surely follow, if the patient

and the practitioner are not willing to persevere, and unless, besides the assumed specific, each case is not treated for its individual peculiarities. But as epilepsy is an intermittent, with intervals often of six months, a short cure is not to be expected, and no treatment is rational in any case unless strictly individualized.

REMARKS, HISTORICAL AND PRACTICAL, ON DISEASES OF INFANTS.*

By E. COPEMAN, M.D., NORWICH,
Consulting Accoucheur to the Norwich Lying-in Charity.

In 1767 an account of the diseases most incident to children was published by Dr. George Armstrong. It does not appear that the diseases of children were much studied or understood in this country before the publication of Dr. Armstrong's work, for he speaks of hydrocephalus almost as a novelty, and the possibility of its being cured but just ascertained. In his remarks on the diseases of children in general, he ably refutes the opinion, at that time very prevalent, and even now by no means universally discarded, that because infants have not the means of expressing their feelings, or describing their complaints by words, there is nothing to be done for them when ill, owing to the difficulty the physician has to encounter in endeavouring to ascertain the nature of their diseases. It would be out of date now to enlarge upon this subject, the prejudice against the medical treatment of children's diseases is confined almost to old women, and but few of the present race of educated medical practitioners will not acknowledge that, to say nothing of the interest necessarily connected with the power to contribute to the relief of the most helpless and interesting part of creation, there is but little more difficulty in distinguishing and treating the diseases of infancy than those of adult age; indeed, in many respects, there is less. In infancy there is no guile, there are no evil habits to counteract; in infancy disease runs a more *natural* course, is less biased by the counteracting powers of moral and physical intemperance; in infancy there is more certainty in the action of medicines, less disappointment in their effects, so that if the use of them be properly understood, their beneficial influence may be more safely relied upon. It is true that ignorance renders the treatment of infantile diseases not only difficult but extremely hazardous, but knowledge is power, to the effectual relief of many little sufferers.

Dr. Armstrong considers *inward fits* the most common complaint incident to infants. "The child appears as if asleep, only the eyelids are not quite closed; and if you observe them narrowly, you shall see the eyes frequently twinkle, with the white of them turned up. There is a kind of tremulous motion in the muscles of the face and lips, which produces something like a smile, or sometimes almost the appearance of a laugh. As the disorder increases, the

* Continued from page 72.

infant's breath seems now and then to stop for a little, the nose becomes pinched, there is a pale circle about the eyes and mouth, which sometimes changes to livid, and comes and goes by turns; the child starts, especially if you go to stir it, though ever so gently, or if you make any noise near it. Thus disturbed, it sighs, or breaks wind, which gives relief for a little, but presently it relapses into dozing. Sometimes it struggles hard before it can break wind, and seems as if falling into convulsions; but a violent burst of wind from the stomach, or vomiting, or a loud fit of crying, sets all to rights again." He speaks of the dangerous consequences of a frequent repetition of these fits, and for the prevention and cure of the complaint, particularly insists upon the child never being laid down to sleep after taking food, till it breaks wind upwards or downwards two or three times; a gentle puke is to be given if necessary, the child preserved from cold, and kept as dry as possible, the limbs and belly being rubbed frequently, and for a good while together, before the fire. He considers convulsions, in most instances, a symptom, and not a disease, often closing the scene in adults as well as in infants. Of hydrocephalus he appears to have possessed but very imperfect notions, and believed it quite incurable until he became acquainted with a case published by Dr. Dobson, in which recovery was effected by means of calomel carried to ptyalism. This case, another communicated by Hunter, and a third, which occurred in his own practice, he has inserted, in order to exemplify the mode of treatment by calomel, and to represent the possibility of cure.

In 1768 appeared "Observations on the Dropsy of the Brain," by Robert Whytt, M.D., Professor of Medicine in the University of Edinburgh. This was perhaps the first essay published in this country professedly on *hydrocephalus*, and it makes an important era in the history of this serious disease, being still considered one of the best descriptions of the affection. Whytt describes hydrocephalus as "either external or internal; the former has its seat in the cellular substance, between the skin and the pericranium, or between this membrane and the skull; in the latter the water is sometimes collected between the *cranium* and *dura mater*, or between this last and the *pia mater*, but most commonly in the ventricles of the brain, immediately below the corpus callosum; and this is not only the most frequent and fatal species of hydrocephalus, but also that with which medical writers seem to have been least acquainted." The youngest infants are not so subject to this kind (internal) as children of two years and upwards. "Of about twenty patients whom I have seen die of the distemper, one only was under half-a-year old, the rest between two and sixteen." He divides the disease into three stages: "the *first* comes on four, five, or six weeks, and sometimes even longer, before death,—is always attended with some degree of fever, sometimes much, sometimes little, and is more particularly characterized by vomiting once or twice a day, or once in two or three days, headache and aversion to light, the bowels being commonly costive, though sometimes

they have returns of a looseness. The *second* stage is dated from the time the pulse, from being quick but regular, becomes slow and irregular; this sometimes happens about three weeks, often a fortnight, or less, before the death of the patient. The diminished frequency and irregularity of the pulse, *the heat of the skin continuing much the same*, are the chief diagnostic marks of the second stage. When the pulse rises again to a feverish quickness, and becomes regular, the *third* stage may be said to begin; and this change in the pulse is observed five, six, or seven days before death. In this stage the patient who, before, was little disposed to sleep, becomes drowsy and comatose, one eyelid, and afterwards the other, become paralytic, the pupils are inactive; the patients are sometimes observed to be constantly raising one of their hands to their head, and are generally troubled with convulsions of the muscles of the arms, legs, or face, as well as with a *subsultus tendinum*. Those who have been costive before often become loose in the third stage, and complain of gripes."

In ten cases examined by Whytt after death he found a clear thin fluid, generally from two to five ounces, in the ventricles of the brain, but never met with water between the *dura mater* and the brain, between the hemispheres, or immediately above the corpus callosum. The fluid did not coagulate by heat.

In the treatment of hydrocephalus Dr. Whytt employed repeated purgative doses of rhubarb and jalap, with calomel, and blisters, but he frankly confesses that he had never had the luck to cure a patient who had those symptoms which with certainty denote this disease.

In the fourth volume of "Medical Observations and Enquiries, by a Society of Physicians in London," there are three papers on hydrocephalus, one by Dr. Fothergill, read August 8, 1768, and two by Dr. William Watson, the respective dates being August, 1768, and April, 1770. From the observations of Dr. Fothergill, it would seem that he had but an obscure notion of the disease, and could with difficulty distinguish it from symptoms supposed to proceed from worms; and as to treatment, he observes—"I must own that it is not in my power to suggest any probable means of curing the disease; it has baffled all my attempts, both when confided in alone, and in consultation with the ablest of the faculty." He describes the disease as seldom occurring in subjects younger than three years, most frequently from five to ten; two or three cases happened from ten to thirteen, and two between seventeen and nineteen years of age. The last four were girls, the former mostly boys, and none of them were peculiarly unhealthy before they were attacked with the disease. Most of them had gone through the small-pox, some the measles likewise; but without any reason to suspect that these had left any foundation for this terrible complaint. Dr. Fothergill differs from Dr. Whytt, with respect to the insidious nature of an attack of hydrocephalus, and says, on the contrary, he has seen children, who, from all appearance, were well, healthy, and active, seized with this distemper, and carried off in about fourteen days.

In Dr. Watson's paper, attention is directed in the first instance to three cases of hydrocephalus; they were all girls; the first six, the second nine, the third fourteen years of age; and they all terminated fatally. "Not only the three cases above mentioned, but several others that have fallen under my notice, have all been fatal; nor has better success attended other physicians both here and elsewhere." The principal feature in Dr. Watson's second paper, which he terms an appendix to the first, is a case which terminated successfully; this was the only instance he had seen of recovery from dropsy of the brain, when, from the attendant symptoms, little doubt remained of the disease being completely formed. It is certainly a remarkable instance of recovery from severe cerebral disease, and exemplifies the remedial power which nature occasionally exercises, even in desperate cases, when not interrupted, but only gently assisted by the interference of art. It teaches us the double lesson,—never to despair, and not to do mischief by overmuch activity.

In the fifth volume of "Medical Commentaries," published 1777, Dr. Percival has given a case of hydrocephalus, in which he thought great good had resulted from the free use of mercurial frictions, by causing absorption of the fluid in the brain, which had produced a manifest tremor at the bregma. His patient, however, died; and in a letter published in the same volume by Dr. Simmons, the latter physician expresses great doubt as to the fluid having been removed by the action of the mercury, and attributes it rather to the several blisters that were applied to the head, and to the application of linen dipped in brandy to the seat of the swelling. It is very probable that both were right, and both wrong, and that the absorption of fluid was the result, not of the local treatment only, but of the conjoint influence of local and constitutional remedies.

In 1779, Dr. Quin published a thesis on internal hydrocephalus, in which he offers a different view of the nature of the disease to that which had before prevailed. The new doctrine propounded by Dr. Quin was to the effect, that the causes of acute hydrocephalus are of a very different nature to those of simple dropsies, (the opinion hitherto entertained,) and are much more closely allied to the causes of acute diseases; and that, in fact, this disease always owes its origin to a morbid accumulation of blood in the vessels of the brain, sometimes proceeding to a degree of inflammation, and generally, but not always, producing an extravasation before death. The opinion which this thesis appears to have originated, that acute hydrocephalus depended upon congestion and inflammation, has had numerous supporters from that time to the present, and has led, as might have been supposed, to the adoption of various degrees of antiphlogistic treatment for its cure.

A few years afterwards, Dr. Michael Underwood published his famous "Treatise on Diseases of Children." The first edition appeared, I believe, in 1784, the fifth in 1805, and the tenth in 1846, edited by Dr. Henry Davies. Other editions have appeared under the superinten-

dence of Drs. Marshall Hall and Merriman; and that recently published by Dr. H. Davies bring up the subjects contained in the treatise to a level with the improvements of the present day. No greater proof of merit in the original work can possibly be accorded; for, from its first appearance to the present time, it has been considered, with the editorial additions and improvements it has at various periods received, a standard authority in this country on the diseases of infants and children. Dr. Underwood was Physician to the British Lying-in Hospital, and from his eminent position in London, enjoyed also ample opportunities of witnessing the diseases of children amongst the highest classes of society. His opportunities for observation were turned to good account by the industrious workings of a powerful mind, and a benevolent desire to promote diffusion of knowledge upon a subject of great interest, but which before his time had not been either widely or successfully investigated. He says, in the preface of his fifth edition, "Prompted by a laudable ambition of being useful in his generation and leaving behind him something beneficial to posterity in the only way he could attempt it, he is persuaded the benefit will not terminate here; but that others will be excited to perfect this long neglected, but most important branch of the profession." How well the anticipations of the author were founded, and how completely they have been fulfilled, are most amply attested both by the future career of his own book, and by the great industry and talent since brought to bear upon the same department of medicine.

Inward fits, a disease much insisted upon by Armstrong, is scarcely noticed by Underwood; indeed, he says he knows no complaint that deserves the name, and considers the symptoms to be merely the effect of a little wind upon the stomach; or, when accompanied with spasm, to be chronic croup, which he always succeeded in removing by the administration of different antispasmodics. Whether or not it be right to acknowledge *inward fits* as a distinct disease, the term does refer to symptoms which it is exceedingly important to observe. It is of great importance for them to be recognized by the mother or nurse; and as the appellation has been familiar to nurses and old women for ages,—and they are extremely tenacious of what is handed down to them by their predecessors,—it is better to give the term a definite meaning, than to abolish it altogether. I was once much struck with an observation of a nursemaid, of no very great experience, about an infant a few days old, who, to all appearance, was perfectly well and healthy. She remarked to the monthly nurse that she had *once or twice* noticed an appearance about the eyes which she thought would turn out to be fits or water in the head. I watched the child very carefully in consequence, but could never, during my visits, nor could the nurse, detect the slightest appearance of disordered health. After awhile, however, the baby suffered from wind and acidity, which were soon removed by suitable remedies; afterwards a mild thrush appeared, but again the child regained its health. It was vaccinated at two months, and passed

well through the disease. Soon after this I lost sight of the infant; it was removed to the sea-side; whilst there was attacked with diarrhoea, a disease then very prevalent, and died, I was told, with symptoms of water in the head. How valuable is the knowledge of any tendency to head affection, in the treatment of diarrhoea, or any other disease in infancy, and consequently, how important for nurses to understand, and be able to communicate to the physician, any symptom, however slight and temporary, that may be calculated to arouse his vigilance or influence his treatment. The above narrative shews that those who are in constant charge of an infant may occasionally notice a suspicious circumstance, which does not present itself to the view of the medical attendant, and from this I deduce an argument in favour of encouraging, amongst nurses and mothers, a knowledge of the symptoms of *inward fits*, instead of banishing it from the catalogue of diseases; not for the sake of enabling them to treat therapeutically, but that they may be competent to give due warning of the necessity for proper medical advice.

At the close of the last century, an "Inquiry into the cause and cure of the Internal Dropsy of the Brain," by Dr. Rush, was published at Philadelphia, and forms one of the papers in the second volume of his "Medical Enquiries and Observations." Having been unsuccessful in all but two cases of internal dropsy of the brain, which came under his care, Dr. Rush was led to entertain doubts of the common theory of the disease, and to suspect that the effusion of water was only the effect of inflammatory disease in the brain. In accordance with this view of the nature of the disease, he resolved to alter his mode of treatment. The first remedy indicated was blood-letting, and he quotes seven cases, which all terminated successfully after free blood-letting, assisted by purgatives and topical applications. "When blood-letting," he remarks, "has failed of curing this disease, I am disposed to ascribe it to its being used less copiously than the disease required; and since I have adopted depleting remedies, I have declined giving mercury altogether, except when combined with some purging medicine," because of the uncertainty of its operation, its frequent inefficacy when it excites a salivation, and above all, its disposition to produce gangrene in the tender jaws of children.

(To be continued.)

COMA RESULTING FROM RETAINED BILIARY SECRETION.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Dr. Ranking has published an interesting case in your Journal, (May 3rd, 1848,) showing how coma may be caused by retained biliary secretion. There can be no doubt that the brain may be affected in various and even opposite ways by the same cause. A

few years ago I met with a well-marked case of retention of vitiated bile, in which excessive watchfulness was the most prominent symptom.

On the 16th of January, 1841, I was sent for to see a farm-labourer living in a village about four miles distant from my residence. He was in bed, complaining of general uneasiness, with nausea, constipated bowels, and slight headache; his pulse was about 90, full and soft; there was some heat of the skin, but the forehead was not hotter than any other part of the surface; the tongue was covered with a dirty fur; the eyes had a watchful and rather vacant appearance, and his wife said he had had no sleep for some time; there was no delirium. I looked on the case as one of deranged stomach and bowels, and without paying any attention to this statement about sleeplessness, I gave him an emetic, to be followed by a smart dose of calomel and jalap, and a saline mixture.

I did not see the patient again until the 18th, when I found the symptoms much the same. The nausea had been relieved by the emetic, but the aperient had acted very imperfectly on the bowels. He had never slept. I sent him another powder of calomel and jalap, to be followed by a grain of calomel, and a dose of senna and salts every four hours.

On the 19th I found the bowels had not been acted on at all, so I gave the man an enema, which brought away some scybala, and directed him to persevere with the medicine I had given him the day before. As his wife protested he "had never slept a wink since he had been taken ill," I sent him a grain of muriate of morphia in a draught, to be taken at bed-time.

20th. No sleep. Other symptoms the same. Bowels very slightly moved. Continue aperient mixture and calomel pills. I felt unwilling to give a night-draught again.

23rd Finding that perseverance with alteratives and aperients had made no difference with respect to the *insomnia*, of which both the man and his wife complained bitterly, I sent him two grains of muriate of morphia in a mixture, directing him to take half that night and the remainder the next, and ordered him to continue taking his medicine as before.

On the 24th, I found that, notwithstanding the man had made a mistake, and taken the whole of his sedative mixture at once, he had still been unable to sleep. The bowels still continued very sluggish. I therefore added some Pil. Cambog. Comp. to the calomel pills, and increased the strength of the aperient mixture.

On the 25th, I found him voiding an immense quantity of feculent matter of the exact colour and consistency of tar. The nature of the case was now becoming evident; the uneasy sensations were already somewhat relieved, and as there could now be no doubt as to the propriety of the course I was pursuing, I made him persevere with his medicine.

26th. I found the man going on quite favourably; he had slept pretty well, and felt quite comfortable; the evacuations continued copious, and of the same character as the day before. As that was the case, I thought it expedient that he should not discontinue the

alterative and aperient pan until there was some improvement in their appearance, which did not take place until about the 9th, after which the man was speedily quite well. Notwithstanding the quantity of calomel taken, the gums were not at all affected.

I am, Sir,

Your most obedient servant,

R. U. WEST.

Hogsthorpe, Alford, Lincolnshire,

May 14, 1849.

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF PROFESSOR SANDS COX, F.R.S., SENIOR SURGEON TO THE HOSPITAL.

Reported by Mr. PETER HINCKES BIRD, late Resident
Medical Officer.

CASE XX.

TRANSVERSE FRACTURE OF THE FEMUR.

William Harris, aged 28, carpenter, admitted into the Queen's Hospital October 27th, 1846, under the care of Professor Cox. He states that about an hour since a large quantity of timber fell upon his legs and thighs; he immediately lost the use of his right leg, and experienced severe pain in the thigh.

On admittance it was found that he had lost the use of the right limb; the thigh was "bowed," but there was no apparent shortening; the foot and knee were turned outwards. On fixing the upper part of the femur, and on moving the lower part by grasping the knee, distinct crepitus was perceived; the inner edge of the foot appeared to be turned much upwards, but this he says is the result of an old sprain. The patient was placed on a hard bed, and Liston's long splint applied.

28th. Feels comfortable; there is no swelling.

November 13th. Doing well; the bone is in good position; callus can be distinctly felt on the outer side of the seat of the fracture; there is no shortening of the limb.

December 1st. Is out of bed; the limb is perfectly straight, and the bone is firmly united; can walk pretty well.

8th. Discharged.

In transverse fracture of the femur, the displacement may be very slight, and often none at all, for the fractured surfaces of the bone being flat and regular, form, when in contact, a mutual resistance to each other; the lower end drawn upwards by the muscles, meets with resistance from the upper one, which being itself inclined downwards by the weight of the trunk, pushes the former before it, and thus both retain their position in relation to each other. It is not, however, uncommon to find displacement in some cases of fracture in the transverse direction, and to a considerable extent, so as to produce great shortening of the

limb. This occurs when the force applied has been very violent, and has acted upon the ends of the bone after it has caused their fracture, so as to push them from their apposition; or the displacement may be also caused by ill-directed exertions in carrying the patient, the limb not being supported on the same level.

The apposition of the ends of the bone in the transverse fracture may also be disturbed by the action of the flexor muscles of the hip, which may tilt the end of the upper portion of bone upwards, and then the other muscles may pull upon the lower portion, and draw it behind or to one side.

When the fracture occurs just below the trochanter minor, this action of the flexor muscles is one of the chief causes of the displacement, and the most troublesome one to guard against. It is probable, however, that in the majority of cases, the action of the muscles has but little to do with the primary displacement, but that the force that produces the fracture first of all pushes the ends of the bone from their contact, and that the muscles are only secondary in their action.

Although in the transverse fracture there may not be always displacement with regard to the length of the limb, there generally is with regard to the long axis, for the lower portion may be rotated outwards, while the upper portion remains stationary; this was well seen in the above case. When the patient is placed on his back in bed, this rotation of the lower portion outwards becomes very apparent, by the extreme eversion of the foot and knee; and in almost all fractures of the thigh, whether it be through the neck or shaft of the bone, this is found to be a very prominent symptom. The cause of this rotation outwards is not, perhaps, fully accounted for; it is said that the muscles attached to the bone have a great deal to do with it; they have, no doubt, the power of producing it, but Lonsdale* does not believe that they often act in this manner, and there is quite a sufficient reason to explain it without having recourse to the muscles. He refers to the shape of the limb. The inner and outer edge of the leg and thigh differ greatly as to the line they form, and in the degree in which they support the limb posteriorly, when it is lying horizontally; for the inner side of the calf of the leg is much more fleshy, and extends more beyond the edge of the bone than the outer side, the consequence of which is, that when any pressure is made upon its posterior surface, it pushes this mass of flesh still more in this direction, and so presents a decided obstacle to the rotation inwards; whereas the outside of the leg is smooth and round, and presents a firm surface, which favours rotation in this direction, and more particularly since there is so great an obstacle to its being rotated in the opposite one. Lonsdale conceiving that the simple weight of the limb is sufficient to roll it outwards, when the shape of its outer surface is considered, and when the shaft of the bone is broken, and so having deprived the lower portion of its natural support. The upper portion cannot be rotated outwards, owing to the great trochanter, which will check motion in this direction when the patient is lying on his back, besides which, there is no disposition for the upper portion to roll either in this direction or inwards, for there is not the weight of the leg and foot to drag upon it now that

* A Practical Treatise on Fractures, p. 100.

the bone is broken, which there is upon the lower portion. This rotation always aggravates the displaced state of the fracture, and should be attended to in the reduction.*

The treatment of transverse fractures of the femur is much more satisfactory than that of fractures in the oblique direction, for if they are properly attended to, shortening of the limb seldom results.

CASE XXI.

COMPOUND FRACTURE OF THE LOWER JAW.

Thomas Bradley, aged 18, labourer, was admitted into the Queen's Hospital, October 4th, 1846, under the care of Professor Cox. He states that about two hours ago he was struck by a man's fist on the right side of the face, and afterwards on the left; on the receipt of the last blow he felt his jaw crack, "as if all his teeth were in his mouth." He walked more than a mile to the Hospital.

On admission it was found that the lower jaw was fractured nearly perpendicularly on the left side, the situation of the fracture being between the bicuspid teeth, the first of which was knocked out at the time. The gum was lacerated, and a probe could be easily passed down to the bone; the portions of bone were slightly displaced, the anterior or larger portion falling downwards and forwards, and the posterior being drawn upwards and inwards. The fracture was easily reduced. A piece of pasteboard was moulded to the shape of the lower jaw, and padded with cotton-wool, and retained by a four-tailed bandage. Ordered to keep quiet, and not to talk. Spoon diet.

5th. Slept well last night; some swelling and pain of the face; saliva dribbles away freely.

10th. Doing well; the bones are in good position, and the teeth are on a line. Made, at his own request, out-patient.

26th. Presented himself at the Hospital this morning; the fractured portions have firmly united; there is no deformity of the face.

The shape of the inferior maxillary bone and its prominent situation, render it very liable to fracture, when struck by a hard blow, or by any hard substance, especially on the part between the symphysis and the condyle. Fracture also generally takes place from a blow striking either the ramus or the base of the bone. The force required to fracture the bone in any part must be very great, for the manner in which it articulates with the skull, and its junction at the symphysis, give it great power of resistance. The fracture in the above case was caused by a blow from the fist, and the soft parts were injured to a considerable extent, causing irritation to the glands in the immediate neighbourhood of the mouth, and consequent dribbling of the saliva; the gum was also lacerated so that the bone could be seen, thus rendering the fracture a compound one. We lately had a very bad case of fracture of the jaw in this hospital. A young woman was struck with great force on the face by a heavy piece of iron, which stunned her; the lower jaw was fractured vertically, but the fracture also extended horizontally, so as to separate a considerable portion of bone, which afterwards came away. The alveolar

processes of the front of the upper and lower jaws were also broken off, and both lips were lacerated and contused to a great extent. A perfect cure, without deformity, except that arising from the cicatrices of the wounds, was effected.

In the case of Bradley, the displacement was mostly caused by the weight of the bone, and by the action of the muscles, the large portion being drawn down by the action of the hyoid muscles, while the posterior or smaller portion is drawn upwards and inwards by the masseter and pterygoid muscles.

In cases of this fracture pieces of cork are generally recommended to be placed between the teeth in order to keep the fractured portions in good apposition, but in the above case they were not required as his teeth were very regular.

WEST NORFOLK AND LYNN HOSPITAL.

COMPLICATED SURGICAL CASES UNDER THE CARE OF CHARLES COTTON, M.D., F.R.C.S., &c.

COMPOUND FRACTURE AND POSTERIOR LUXATION (?) OF LOWER JAW: MILD CONCUSSION: SUBSEQUENT OTITIS: IMPAIRED MASTICATION AND DEAFNESS: CURE.

John Hockinstone, aged 30, labourer, admitted September 13th, at three p.m. Was reported as having been struck by an iron monkey, whilst assisting in driving piles upon the railway premises. He was greatly stunned by the accident and afterwards became senseless, when he was immediately conveyed to the hospital. On examining the injured parts the lower lip was found cut, and a wound about three inches in length, parallel, but below the chin, leading to a fracture through the symphysis of the jaw, the ends of which were separated and drawn backwards and downwards within the mouth, and somewhat overlapped. The incisor teeth were loosened and the central ones displaced. Rather profuse bleeding from the auditory passages was observed, and some puffiness and swelling around and immediately in front of each ear. On moving either ramus of the jaw the hæmorrhage from the corresponding ear was much increased, and a squashy sound produced. The condyloid processes were extremely mobile and gave a grating sensation, but no distinct crepitus could be detected. The mouth is half open and some blood appears to come from the back of the fauces. The eyes are suffused from congestion; the surface cool; pulse weak, 96; and the man, though roused by the examination, is still somnolent, listless and heavy.

Hair removed, cold applications to the head and ears, hot bottles to the feet. The patient was placed in bed in an upright position, to allow the jaw to fall forwards, as it was found useless to attempt any further adjustment of the fracture. A drastic purgative enema to be thrown up, should more aggravated cerebral symptoms supervene.

14th. Passed a restless dreamy night; is now quite

* Œuvres Chir. de Dessault, par Bichat, tom. i., p. 180.

rational; the face and injured parts are much swollen; the bleeding from the ears, excepting a trifling oozing, has ceased; pulse feverish. Allow only cold water for diet and continue the applications to the head.

15th. Features much distorted from the swelling above and below the angles of the jaw; articulation indistinct; swallows a little water with the greatest difficulty; the breath is very fetid, and there is a constant dribbling of saliva; pulse weak. Pergat, and give milk in lieu of water.

16th. Cannot sleep; is continually conghing; cold applications to be discontinued. Habeat. Syrup. Papav. Coch. parvum tussi urgente.

18th. Swelling subsiding; cough less; feels pretty easy; bowels acted; there is an offensive sanio-purulent discharge from the wound; the oozing from the ears has ceased.

19th. Bad night; much pain in the ears. Apply hot fomentations.

20th. Much bloody discharge from the ears followed the use of the fomentations, giving considerable relief. The left ear is still in pain and clogged with blood. Arrowroot, broth, or milk diet.

22nd. Sleeps well; œdema of, and discharge from, auditory passages.

26th. Sanious matter from the ears; swelling of the face greatly subsided; silver plate adapted to the jaw and bandage applied.

29th. Delirious during the night; excruciating pain in the right ear. Leeches and hot fomentations applied. To be purged.

30th. Quite easy and comfortable owing to the ears discharging freely.

October 12th. Wound below the chin healed; breath still very offensive, and much dribbling. Apply with a feather frequently, a linctus of honey and myrrh.

Nov. 30th. The mouth admits of being opened to the extent of a quarter of an inch. There is but little irregularity of the fractured symphysis, and union is complete. The articulating processes of the jaw are ankylosed, and the soft parts around are stiffened and consolidated. Considerable purulent weeping continues from the ears, and deafness. Slop diet. Use frequent friction and gentle attempts to open the jaws. Made out-patient.

Dec. 17th. In-patient a few days. Pain and profuse discharge from the ears and increased deafness. The teeth can be separated so as to admit of the end of the finger. *Admoveantur hirudines, iij., sub sing. aures.* Hot fomentations; solution of ox gall to be dropped into the ears daily. To desist from further attempts to move the jaw.

February 23rd, 1848. Discharge from the ears diminishing; much less deaf; can open the mouth to nearly its natural extent; but there is no lateral motion of the jaw.

March 24th. No running from the ears; hearing but slightly impaired. Is regaining daily the power of mastication. Discharged cured.

The bleeding from the ears, extreme mobility of the condyloid processes of the jaw, and other symptoms

manifested at the time of the accident, led to the conclusion that in addition to the compound fracture of the symphysis, dislocation backwards of the jaw had taken place by *contre coup*, and through the yielding of the front walls of each bony auditory meatus, a diagnosis which was rather confirmed than disproved by the ankylosed condition of the jaw which followed, and the frequently recurring attacks of internal otitis. The termination of the case under simply *dietetic* and cautious antiphlogistic discipline was most satisfactory, and the report has at least the interest of recording a rare though not unique form of surgical injury.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, MAY 30, 1849.

THE Anniversary meetings of the parent and various branches of the Association are always regarded with more or less interest by its members, in all parts of the kingdom.

We cannot do better, we think, than take the period which now presents itself as a fitting moment to draw attention to the great and practical benefit which these meetings are capable of producing, if viewed in a proper light, and taken advantage of in a spirit of truthful research.

The Provincial Medical and Surgical Association was established with a two-fold object; that of promoting sociable intercourse among the various members of the profession, and that of making that profession worthy of its high calling, by the cultivation of medical science, and the dissemination of sound views of medical practice. That the first object has been fully gained, we think we may fairly call upon the experience of the past to prove; that the second object has, to a certain extent, also been carried out, we are equally sure; but it is just because we think that much more may be done, that we venture to suggest our future records may be made still more conducive to the absorbing interests of science.

It has always been the opprobrium of our art that its principles are, more or less, unsettled; that we cannot reduce our data to the exactitude essential to the establishment of unvarying rules of practice, and thus place medicine among the sciences strictly called inductive. This is partly owing to circumstances which are beyond our control. The human body varies in its constitution with each individual, and so must

necessarily its diseases, and their treatment also. But much of this apparently inherent defect in the basis of our science depends upon the want of co-operation among ourselves,—in the observation, registering, and enunciation in a succinct form, of facts. It is a pleasing illusion for an active mind to build up beautiful theories of disease, but if the basis of the structure is not sound, it not only tumbles down about his own ears, but it more or less injures the whole fabric of medical science in its fall.

We cannot illustrate this remark better than by referring to the *results* of the various theories which marked the schools of medicine during the latter part of the last, and the beginning of the present, century. One class of men referred the origin of disease to the solid structure of the body, and were therefore termed Solidists; another to the fluids, who were, *par excellence*, Humorists. One party located the origin of fever in the intestinal tube; another with equal confidence in the brain. Here we find men of education and eminence advising and practising large bleedings in fever and rheumatism; there equally clever advocates condemning the practice as injurious and fatal. Nor are we in our own times free from much of this dangerous and humiliating trifling. The cholera has just been desolating our shores. We find our able men not only advocating, but bringing strong proofs, of the value of small doses of mercury, as a sure remedy in the disease; another condemns the practice as injurious, and argues that the disease is an ague, and treats it with quinine. Chloroform here; acetate of lead there. Bleeding from the feet into a hot bath was specific in Persia, and fifty other remedies have been equally successful in various parts of Great Britain. Well: cholera has, we hope, left us. Are our principles of treatment one iota more settled than they were? We fear not. And why? Simply because facts have been disregarded, the experience of others neglected, and the utter want of a rational system of observation and comparison of the effects of what we know, which has been manifested by those in authority, during the late epidemic. As a contrast to this unsatisfactory statement, let us turn for a moment to an opposite picture.

If an educated medical man of the present day is consulted in a case of suspected disease of the lungs, he examines the subclavicular region;

if he finds no dulness on percussion, and the breath sound normal, he pronounces at once that the individual is not phthisical. It is true there may be rare exceptional cases, but in these the symptoms are generally clearly indicated, and they are so rare that a man may pass the best part of his life without meeting with one. It is impossible to overrate the value of this diagnostic law. How many a fear has its knowledge dispelled? Nay, how often, by driving away fear, has it prevented that wear and tear of mind—that constant dread which we know to be favourable to the formation of tuberculous deposit? And yet this fact we owe to the untiring energy,—the zeal,—the profound and philosophical exactitude of one man. The name of Louis must ever remain indelibly connected with the progress of medical science in the nineteenth century. But of this very disease there is still much to be learned. After ages of hopeless research, we have been lately startled with the announcement that a remedy for phthisis pulmonalis has been found.

We have the authority of an eminent physician, a worthy pupil of the school of Louis, that consumption of the lungs has been cured, and that “every day’s experience increases his astonishment at the effects produced by cod-liver oil in catalectic deposits.”*

Now, here is a subject worthy of attention for an Association which numbers among its members so many men capable of entering into the enquiry, whose practice will give them the means, and whose love of their profession the will and the spirit, to carry it out. The—alas! sole remaining Editor of this Journal, has undertaken to conduct this enquiry, with the assistance of the members of the Association. Let us urge upon those who attend the approaching meetings, not to lose sight of this important investigation. Desultry information will be of no value: every particular in registering the facts must be noted down clearly—the name, age, sex, temperament, hereditary tendency, stage of disease, previous history, present condition, physical and general symptoms, progress of the case, with every particular of treatment, must be noted down, and the results, under any circumstances, will prove a most valuable report upon the disease.

It is undoubtedly true, that the habits and pursuits of many members of the profession are

* Dr. Williams’s “Principles and Practice of Medicine.”

not calculated to assist in investigations of this kind. They are too much occupied with the business, or even, often, with the pleasures of life, to devote any time to pursuits of a literary character; but if nineteen out of twenty—a proportion, we think, quite beyond the mark—are of this class, if every twentieth member of the Association will enter *con amore* into this investigation, or others of a similar character, we shall have the united practical observations of nearly 200 practitioners in different localities throughout the kingdom. We have no hesitation in affirming that a report produced from such materials, and extending over one or two years, would be the most valuable document ever devoted to the interests of science and humanity.

Review.

On Cancerous and Cancroid Growths. By JOHN HUGHES BENNETT, M.D., F.R.S.E., &c. Edinburgh: Sutherland and Knox. 8vo. pp. 260. With One Hundred and Ninety Illustrations, copied from Nature, and Drawn on Wood by the Author.

Dr. Bennett believes that the only method of lessening the uncertainty that prevails with regard to the nature, diagnosis, and treatment of cancer, is careful investigation into the clinical parts of each case, conjoined with an accurate and minute examination of the morbid growth. In the present work the symptoms and exact appearances of the cancerous structure, as seen by the naked eye, as well as under the microscope, are given in fifty-six cases. Each case is illustrated by one or more wood-cuts, which, in order to insure correct delineation, were drawn by the author himself, and cannot but be of great value to all those who are desirous of studying the minute structure of morbid growths. The description of these cases, with short commentaries, which serve to point out the particular facts of interest contained in each, constitutes the first part of the work. The second part consists of a systematic account of cancers derived from original observation, as well as from the writings of all the modern English, French, and German writers on the subject.

At the commencement of the first part the author gives some very useful instructions as to the manner in which morbid growths should be examined with a microscope, and by means of re-agents. Such examination always necessitates great skill in manipulation, considerable time, and knowledge of pathology, and no one can read the account of disease given by Dr. Bennett without feeling satisfied of the uncommon pains he has taken with this part of the book.

The term *CANCEROUS* is employed by the author to denote that morbid growth which pathologists comprehend under the term *scirrhus*, *encephaloma*, and *colloid cancer*, and in which nucleated cells infiltrated among the filaments of a fibrous stroma are always found. The word *CANCROID* is, following Alibert, used to denote those various kinds of lesion which more or less resemble cancers to the naked eye, which are continually mistaken for them by practical men, and yet do not correspond with them in structure. These are enumerated under the heads of *fibro-nucleated*, *epithelial*, *fibrous*, *cartilaginous*, *fatty*, and *tubercular* *cancroid* growths.

The fifty-six cases described in the first part of the work contain instances of cancerous growths in most of the textures and organs of the body, as well as of the several *cancroid* growths above enumerated. Not a few of these presented specimens of the same lesion, more or less modified in various parts of the frame. Some forms of cancerous and *cancroid* structure are here described for the first time; among these may be mentioned (*Obs. vii.*) a peculiar tumour removed from the breast by Mr. Page, of Carlisle; *Obs. ix.*, a fungoid tumour of the bladder; *Obs. xxi.* to *xxiv.*, or four cases of *cancroid*, or fibrous hypertrophy of the stomach, hitherto considered as *scirrhus*; *Obs. xxxi.*, cancer of omentum and peritoneum loaded with calcareous deposit; *Obs. xxxii.*, a supposed cancer of the brain, which proved to be tubercle; *Obs. xxxiii.*, a peculiar *cancroid* tumour of the tentorium; *Obs. xxxiv.*, *xxxvi.*, and *xlvi.*, illustrative of a new kind of growth, called by the author *fibro-nucleated*; and, *Obs. lvi.*, an epithelial ulcer of the tongue. This part of the work contains descriptions of morbid growths of the female mamma in ten cases; of the testicle in two cases, of the uterus in five cases; of the stomach and pylorus twelve cases; of the lung in one case; of the duodenum in two cases; of the rectum in one case; of the omentum in three cases; of the parotid gland and neck in four cases; of the brain in two cases; of the bones and muscles in eight cases; and of the integuments, face, lip, scrotum and extremities in other cases. There are four cases of epithelial cancer, three of *enchondroma*, and five of *colloid cancer*. One of these latter (*colloid* of the peritoneum) is much more extensive than the case lately published by Dr. Ballard, in the "Transactions" of the Royal Medical Chirurgical Society of London.

The author has taken pains not only to describe each of these cases in a most accurate and minute manner, in the triple relation of symptoms during life, *post-mortem* appearances, and minute structure of the morbid growth, but he has carefully given figures of the latter in every instance, feeling assured "that no mere verbal description of ultimate tissues is sufficient to communicate correct impressions of them to others." Many cases are illustrated by four or five figures, and

one contains seven. These illustrations give a particular value to the work, and we agree with the author in thinking that they will be most useful to the surgeons of this country as a guide to the structural differences in cancerous and canceroid growths. But, as a more detailed analysis of the cases themselves without these illustrations would be very imperfect, we pass on to the consideration of the second part of the work, in which is given a systematic account of cancers, partly founded on original observation, and partly from the accounts of others.

Dr. Bennett treats the subject of cancerous and canceroid growths under the following heads:—1, histology; 2, chemical composition; 3, general anatomy; 4, pathology; 5, statistics; 6, diagnosis; 7, prognosis; and 8, rational treatment.

I. HISTOLOGY.—The different cancerous and canceroid growths contain the following elementary forms:—1. Molecules and granules. 2. Naked nuclei. 3. Cells of various kinds. 4. Filaments or fibres. 5. Blood-vessels. 6. Crystals. These are the elementary forms of all morbid products, nor is there anything characteristic of cancer in either of them when viewed alone. It is only in relation to each other they become important.

1. *Molecules and Granules.*—By the term *molecule*, is understood a minute body in which no determinate external edge and internal centre can be discovered. By *granule* is meant a body which varies greatly in size, and is distinguished by possessing a distinct shadowed ring or margin, the external edge of which is abrupt. The distinction between molecule and granule is only referable to size, and the magnifying power with which they are viewed. These bodies vary in composition and shape, and are formed by precipitation and by disintegration. They may be produced mechanically, and have distinct movements of their own. The author considers that they constitute the real basis of all the tissues, and not the cell, as maintained by Schwann, or the nucleus, as is contended for by Henle. "No cells" he says "are formed without nuclei, and no nuclei without granules; and it is a knowledge of the laws regulating the disposition of the latter in an exudation, and within nuclei and cells, that must guide us to rational therapeutics, so far as the diseases of nutrition are concerned."

2. *Naked Nuclei.*—The nuclei formed in cancerous and canceroid growths are produced in the same manner as similar bodies in other textures, and may be primary or secondary. Dr. Bennett, however, points out that there are some growths, which he calls fibro-nucleated, entirely composed of fibres and naked nuclei. Such growths have even the power of returning after excision—a circumstance not considered by him as any proof of malignancy. On the contrary, he gives cases which satisfactorily show that some tumours may occasionally return consisting of a single blastema, with the earliest traces of commencing structure; others, when organization has proceeded so far as to constitute a fibro-nucleated texture; a third class, where perfect cells are formed; and a fourth, where the whole consists of fibres. Naked nuclei are not peculiar to cancerous formations, and whether they possess the power of

re-development, like cells, is unknown. No part, however, shows that they are capable of spreading into, and giving rise to morbid growths in neighbouring textures.

3. *Cells.*—Although there is no kind of cell formation which at all times, and under all circumstances, is capable of being distinguished from any other form of cell growth, great differences exist among them, the study of which is most important in distinguishing one tissue from another. In cancerous and canceroid growths, the following cells have been observed:—1. The cancer cell. 2. Epithelial cell. 3. Cartilage cell. 4. Compound granular cell. 5. Fibro-plastic or fusiform cell. 6. Pus cell. Dr. Bennett gives a lengthened and minute description of each of these, during which, he continually refers, in illustration, to the numerous figures with which the first part of the work, and this chapter, are abundantly supplied, and without which his description would be unintelligible. The following is his account of the differences existing between cancer and epithelial cells:—"It is important to know that a young pavement epithelial cell, when isolated and viewed by itself, presents all the physical characters of a cancer cell. This is especially the case when they have been lying some time in serum or other fluid, as often occurs with the cells lining the air vesicles of the lungs, the ventricles of the brain, the mucous coat of the bladder, &c. When studied, however, in mass, nothing can be more easy than to distinguish them. They have a disposition to run together in groups, to adhere at their edges, and are of tolerably uniform size. Cancer cells, on the other hand, never exhibit a tendency to run together in groups, but are for the most part separated by a greater or less quantity of molecular and granular matter, either disintegrated, or aggregated together. They never adhere at their edges, and vary greatly in size. As epithelial cells become older, their dissimilarity becomes greater. They are then flatter, and resemble scales. They are also more opaque and more resistant to the action of acetic acid."

4. *Filaments and Fibres.*—Fibrous tissue is supposed to be formed in three ways—1st, by the precipitation in a fluid blastema of fibrinous molecules in the form of rows, which afterwards melt together, and become consolidated into filaments. 2nd. By the accumulation of granules, so as to produce by their uniting together a spindle-shaped nucleus, which, by its elongation, splits up the coagulated exudation into laminae and fibres, as is observed in many forms of fibrous tissue. 3rdly. By the formation of a cell, (fibro-plastic cell,) which becomes elongated at both ends to form a fusiform corpuscle, which ultimately splits up into filaments. All these modes of formation are well observed in different cancerous and canceroid growths.

5. *Blood-vessels*, and, 6. *Crystals*, present nothing peculiar in the structures under consideration.

II. CHEMISTRY.—All that can be determined from the few analyses of cancerous and supposed cancerous tumours that have been made is, that they contain the same constitutional elements as other forms of exudation from the blood, and that it is impossible to distinguish these, chemically, from other morbid products, or even from healthy tissues. It is not by analysing large masses of morbid structure, that any light will be thrown on the chemistry of cancer; but rather by separating, with the aid of the microscope, the minute

structural elements entering into the composition of the growth, and then endeavouring by chemical manipulations under the same instrument, to ascertain the exact nature of each. In this way histologists are enabled to separate the chemical principles of cancerous and cancroid growths into four groups, viz.,—1st, albuminous; 2nd, fatty; 3rd, mineral; and 4th, pigmentary principles.

Albumen constitutes the basis of the fibrous element found in morbid structures. The author brings forward numerous arguments to shew that fibrin is formed from albumen, and that its occasional increased amount in the blood is an effect, rather than as some have supposed, the cause of so-called inflammatory diseases. The albuminous principle once coagulated in the form of molecule, fibre, or membrane, is rendered more transparent by acetic acid. This property of acetic acid is a very valuable one for the histologist, he is thereby enabled to give transparency to thin sections and filaments, and partly dissolve cell walls.

Fatty matters may exist chemically in cancerous and cancroid growths under four conditions, that is,—free, saponified, non-saponifiable, and as fatty acid. Structurally, it is never free; for, being invariably associated with fluid albumen, no sooner is oil precipitated so as to assume form, than the minutest granule of it becomes enclosed in a thin coagulated film of albumen. Such granules disappear on the addition of æther, and their number is a tolerable index of the amount of fatty matter present. Fat may enter the body ready formed in the food, and it may be produced in the system from changes which occur in starch, gum, sugar, &c. It is also probable that the albuminous principles may be converted into fat, of which the presence of compound granular corpuscles in old exudations is the most common evidence. Fat, probably held in solution, enters the walls of previously-existing cells by endosmosis, and is precipitated in the form of granules, which become enveloped with a layer of albumen, and are prevented from passing out. Hence various kinds of these bodies act as mere storehouses for excessive formations of fat in morbid growths, as the adipose cells proper perform the same function in healthy tissues. The conversion of muscular fibrillæ into fat may be seen to take place under the microscope, independent of cells or nuclei.

Mineral principles are not uncommon in cancerous and cancroid growths, and occasionally they also enter pre-existing cells in a state of solution, and become afterwards precipitated, so as to assume somewhat of an organized appearance, of which a very remarkable instance is given (Obs. xxxiii.) in a case of tumour attached to the tentorium.

Pigmentary principles are all derived from the blood. The black pigment found in melanosis is accumulated within cells, and disappears on the addition of nitric acid or chlorine, whilst that which accumulates in the bronchial glands and lungs of old people, and in the black phthisis of colliers, does not. In the latter case the black substance is undoubtedly carbon; in the former its nature is unknown.

III. GENERAL ANATOMY.—The author agrees with Dr. Walshe in thinking that there are only three forms of cancer properly so called,—namely, scirrhus, encephaloma, and colloid, of each of which a descrip-

tion is given. The cancroid growths we have already enumerated, and these are also described with the aid of numerous figures. Want of space prevents our following the author through this chapter, although we recommend it to the perusal of our readers, especially the remarks on epithelial cancroid growths.

(To be continued.)

COD-LIVER OIL IN PHTHISIS.

DR. RANKING'S INQUIRIES.

The points to which Dr. Ranking would respectfully direct attention are—

Number of cases, successful and unsuccessful.

Stage of the disease in different cases in which it was exhibited, as marked by the physical signs.

Degree of amendment produced, and its duration.

Quality, dose, &c., of the oil.

General effects as regards diminution of night-sweats, expectoration, and increase of weight, &c., &c.

Any other information deemed valuable.

Torquay, May 18th, 1849.

Dear Sir,—During a visit to Edinburgh in 1845, the late Dr. William Campbell pointed out to me the efficacy of cod-liver oil in scrofula, rachitis, and the debility which often follows dentition in children. I repeated my visit the following year, when the practice was confirmed by that accomplished physician, and accurate observer, Dr. John Hughes Bennett, who also kindly showed me numerous cases of bronchitis and of reputed consumption in which it had been employed successfully, as well as many specimens of disease of the lungs, in which cavities had become perfectly consolidated under its use, the patients having died of other diseases. Amongst many others was a remarkable instance of a man, who had been thus treated formerly in the Edinburgh Infirmary, and who had died four years after of compound fracture of the leg in the same Institution. I had prescribed it many years ago in chronic rheumatism, but I was not previously aware of its having been employed in diseases of the lungs, and others of defective nutrition.

On my return to this place, I found on enquiry, that it had been occasionally but rarely given, and shortly afterwards I published a paper in the Journal, directing the attention of the profession to its administration in certain cases. During the following winter numerous opportunities of testing its efficacy offered, and it was presented in a variety of cases with decided benefit, and in one especially, in which the existence of a tuberculous abscess was satisfactorily ascertained by repeated careful examinations with the stethoscope, to such an extent as to render recovery almost hopeless. This patient was weighed, and the limbs were measured, before it was exhibited; the experiment was repeated the first day of every month. At the expiration of the first month a sensible improvement was manifest in the

weight and size of the limbs. This amendment was progressive, but after some time an unfavourable change was observed, the weight and size diminished, and the cough and expectoration increased. On close investigation it was discovered that a different oil had been substituted for that originally given, and on returning to it a speedy restoration to the former favourable state followed, and the patient gradually increased from five stone to eight stone six pounds, all the other symptoms which had so justly alarmed the friends having disappeared. The recovery has been confirmed by a residence in this mild climate during the last three winters, and the patient is now in the enjoyment of robust health.

Not having kept a register of cases I cannot furnish all the details you require, but the oil will be found most efficacious in bronchitis, and in cases of cough, with copious expectoration, accompanied with emaciation and night sweats, and where no derangement of the bowels existed. One table-spoonful three times a day will generally be found a sufficient dose for an adult, although, in some cases, a larger quantity may be taken with advantage, and I well remember an instance in which four ounces were taken daily for a long time, with marked benefit. I have always used the Scotch oil, which is manufactured at Leith, and supplied to the chemists in this town by Duncan and Flockhart, of Edinburgh. The duration of its employment must depend on the case, and the judgment of the physician; it may be advantageously suspended sometimes, and preparations of steel usefully substituted in its stead, and sometimes both remedies may be judiciously conjoined.

To give some idea how generally it is prescribed, I enquired of the nine chemists in this place what quantity of the oil they had sold from the first of November last to the first of April, and I found that one had disposed of forty gallons, and had nearly exhausted ten on hand; another twenty-two gallons; and the third sixteen, besides other oil obtained from London, which some preferred. I conclude, therefore, that so large a quantity of a remedy, not of the most agreeable kind, would scarcely have been consumed in a small locality, unless it had been found beneficial, and I observe that some of my medical brethren, who at first were prejudiced against it, and deemed it a species of quackery, averring that they could not prevail on their patients to swallow so nauseous a dose, had prescribed it freely, and find to their astonishment, that patients rarely make any serious objection to it.

The following case is an example of the beneficial exhibition of cod-liver oil:—

I was consulted by a gentleman nearly twenty years since, who had lost two brothers in consumption, and whose symptoms were so threatening as to excite very great apprehension for his safety. He had gradually been emaciating for some months, with slight cough, hoarseness, and some ulceration of the throat, attended with much debility. Under general treatment and careful attention he slowly recovered, and continued in good health until a year ago, when he became alarmed at

the return of some of his former symptoms. His appetite and spirits failed, and he suffered so much from irritation in the throat, as to oblige him to give up his duty in the church. As there was nothing in his case to forbid the use of the oil, I advised him to give it a full trial. He began to take it in June last, and in the following January he wrote to tell me that he soon experienced its good effects, that he had quite recovered his voice and strength, and that he had increased fourteen pounds in weight. He also added that he had given it to many of his poor neighbours in scrofula, and other diseases of weakness, with much benefit.

In conversation with Dr. Williams on the subject, he remarked to me, that a week scarcely passed in which the oil did not reveal miracles to him.

JONATHAN TOOGOOD.

To Dr. Ranking.

Proceedings of Societies.

BIRMINGHAM PATHOLOGICAL SOCIETY.*

February 1st, 1849.

W. H. PARTRIDGE, Esq., in the Chair.

DISEASED PLACENTA, CONTAINING AN APOPLECTIC EFFUSION.

Mr. F. Elkington related the following particulars of this case:—

December 30th, 1848. I was requested to visit Mrs. H., who states she has been out of health for nearly twelve months. She is 32 years of age; has been married twice; to her present husband about two years. Had two children by her first husband, but none since her last marriage. Has had a constant vaginal discharge for some months, and an aching in the back, hips, and thighs; at times also a pain from sexual intercourse. Her appetite has been bad; bowels costive. She was unwell August 3rd; ceased to be so on the 4th; she returned home from a month's visit on the 5th or 6th. Shortly after her return to her husband, she fancied she was pregnant; had the same symptoms she had had in her former pregnancies, and gradually increased in size up to the 2nd or 3rd week in December. She did not menstruate after August, but had been regularly unwell up to that time. About the 15th of December she walked several miles, after which she was a good deal fatigued, and felt a weight at the lower part of the abdomen. The leucorrhœal discharge was slightly coloured, and more profuse. From this time she lost all symptoms of pregnancy, her bosom got softer and smaller, and her figure much less. The vaginal discharge was copious and constant, and of a dirty yellowish colour.

December 31st. The bowels have been freely moved; she is very thin; tongue clean; pulse feeble; the breasts are small and flaccid; there is no areola around the nipples. The abdomen is small; the uterus cannot be felt by external examination, except when the ends of the fingers are pressed down behind the pubis.

* Continued from page 272.

Examination per vaginam.—The vagina is relaxed; the os uteri puffy; the anterior aspect of the cervix enlarged; the body of the uterus is enlarged generally, more especially so anteriorly, but there is none of the hardness of disease communicated to the finger. On raising the body of the uterus with the left hand in the vagina, the fundus uteri can then be distinctly felt with the fingers of the right hand externally.

Examination with the speculum.—A large quantity of muco-purulent discharge was occupying the upper part of the vagina. There is extensive ulceration of the os uteri, covering the greater part of the posterior lip, the whole of the anterior, and extending forwards to the cervix. The ulceration looks unhealthy; the granulations pale and flabby.

I told her I believed she was pregnant, but that the child was dead, the vitality of the foetus having been destroyed probably at the time she took such immoderate exercise, the ulceration, which has existed some months, having weakened the foetus. She did not believe that she was pregnant, and said she was suffering from disease only.

She was ordered to take the Tinct. Ferri. Mur. in Inf. Quassiae, bis die; an aperient occasionally. To use a slight astringent injection; to have the Argenti Nitratiss applied to the ulcer twice a week. To observe the recumbent position, &c. &c.

January 20th, 1849. She has progressively improved; the ulceration is smaller, and more healthy looking; the discharge less. On making a digital examination to-day, I thought the uterus had increased in size since my first examination, and on that account suggested the possibility of the foetus being still alive, and that she had not become pregnant so soon as August. She replied she was now confident she was not pregnant.

31st. When I paid my usual visit this morning, she informed me she had miscarried; that the day before, after going down stairs, she had slight pains, which increased in the evening, and at length the foetus and placenta were expelled. The foetus was small and shrivelled, but probably, at least, a four months' foetus. The placenta was small, hard, and pale; on the maternal surface was seen a long fissure, and on separating its edges a large coagulum embedded in the substance of the organ. This was not seen until the edges of the fissure were separated. From the appearance of the foetus, and especially of the placenta, it is probable that the clot was formed after taking such a long walk, and that the ulceration of the os, by keeping up a congested and morbid state of the uterus, had acted as a predisposing cause.

February 23rd. Ulcer nearly healed, but there was still two spots of ulcer, each about the size of a pea, on the anterior lip. The uterus and cervix have regained their normal character.

LARGE FLESHY TUMOUR OF THE PELVIS, SERIOUSLY OBSTRUCTING DELIVERY, WHICH WAS EFFECTED BY THE AID OF CHLOROFORM: DEATH ON THE SIXTH OR SEVENTH DAY.

Mr. F. Elkington presented a preparation removed from a lady who died about seven days after delivery.

He saw her, in consultation with the gentleman who regularly attended her, for the first time, August 19th, 1848, when he took the following notes of the case:—

She is forty years of age, short, has had four children, and was confined of the last in August, 1847. An arm presentation. Child still-born. About a fortnight before her confinement, in 1847, as she was walking down the garden, she caught her foot against a clothe's line, which was lying across the walk, and fell upon her face. The left side of the abdomen was much bruised, and painful for some days afterwards. She recovered rapidly after her labour, and remained well for some months. She menstruated last in April; at the end of the month she thought she was pregnant. In July, whilst busily occupied in the kitchen, below stairs, she heard one of the children, who was up stairs, suddenly scream out, and she ran very quickly up stairs, to the top of the house; in doing so she says she felt as if something inside her had turned over. From that time she had pain in the left side, a difficulty in passing her water, always greatest in the morning, with a frequent desire to do so. She perceived a small tumour, about the size of an egg, in the left iliac fossa, soon after she ran up stairs, which she says has continued ever since, and been painful on pressure; has not been able to lie on that side; has had weight and bearing-down. These symptoms have continued more or less ever since. A fortnight ago she had a slight discharge, it almost immediately went off again.

On Tuesday last, August 15th, she went to a wedding, and in the evening danced. On Thursday or Friday she had diarrhoea, from imprudent diet, all the symptoms increased, violent paroxysm of pain, bearing down, &c. She considered herself in labour, and sent for her surgeon, who found her suffering agonizing pain, and after making an examination, concluded that she had retroversio uteri. He passed the female catheter, drew off a small quantity of urine, and gave her twenty-five drops of Liquor Opii; I saw her a few hours after; she had passed a little urine several times; she had still frequent paroxysms of pain, but they were not so severe. Pain in the sacrum; weight and bearing down. She said she had quickened, and had felt the child several times.

On examining the abdomen, I found on the *right* side, about midway between the spine of the ilium and the umbilicus, a swelling the size of a cricket-ball, distinctly circumscribed, and apparently unconnected with either the bladder or the uterus. The left side and front of the abdomen was entirely free from any swelling. On examining per vaginam the uterus was found very low in the pelvis, the os thrown above the pelvis, and could scarcely be felt. On the left side of the pelvis the uterus was pressed so low down, that the finger could not be passed in *that* direction; it was on a line with the outer edge of the ramus ischii. In the right side of the pelvis there was more room, allowing the finger to pass up between the uterus and side of the pelvis. The rectum was not much pressed open; the uterus appeared chiefly to be thrown to the *left side*, and to the front of the pelvis. A male elastic catheter was passed, and a small quantity of urine drawn off; afterwards the bowels were freely opened by castor oil. She was ordered to keep in bed, and to rest at times upon the elbows and knees.

20th. Has had the bowels well opened by castor oil; passed water several times, and with less pain. Has had a good night without any opiate. The external swelling is a little altered in character, it is not so distinctly circumscribed, feels softer, and can be traced down into the pelvis, as if it were connected with the uterus. The position of the uterus much the same. An attempt was made to raise it, but without success; it was slightly moveable, appearing to yield a little to pressure.

As there is no constitutional disturbance, and but little local suffering at the present time, we think it will be advisable to avoid any active interference, but to watch her carefully. I did not see her again till she was in labour.

Sunday, December 3rd. I was requested to visit her again; I found she had been in labour some hours. Dr. ——— informed me she had on Tuesday a sudden attack of severe pain in the right iliac region, followed by a smartish attack of fever; the membranes ruptured the following day, (Wednesday,) and she has suffered pains, more or less, every day. He had made several examinations during the week, and found the os uteri high up, but sufficiently open to admit two fingers. She was taken worse this morning (December 3rd) about four o'clock, at which time labour appears to have commenced. There was little or no advancement till 7 or 8 p.m. The pelvis was nearly occupied by a tumour, which prevented the descent of the uterus. About 8 p.m., whilst Dr. ——— was sitting down stairs, both arms suddenly came down; previously he had not been able to ascertain the nature of the presentation. He introduced his hand immediately, and succeeded in getting hold of one foot, but experienced so much difficulty and resistance in bringing it down, that he abandoned the attempt. In making the attempt to turn he had pushed up a great part of the tumour out of the pelvis. At my next visit, 9 p.m., she was feverish, anxious, and excited; pulse quick; both arms were down; the left knee could be felt above the pelvis; the foot had slipped up out of reach; the tumour still occupied the back-part of the pelvis, but the greater portion of it was now felt externally above the pelvis and right ilium; it was firm, and inelastic in character. The uterus was irregular, high up, and firmly contracted upon the child; the pains were frequent and severe.

She was supposed to be not more than eight months advanced in pregnancy, and although the child was probably a small one, still with a large tumour in the pelvis, the peculiarly awkward position of the child, and the contracted state of the uterus, there appeared to be little probability of turning being effected with safety. We determined, however, to try the effect of chloroform, and whilst she was under its influence, to make an attempt to bring down the knee; this was fortunately readily accomplished, the breech soon followed, and delivery completed in a few minutes.

On making an examination after the expulsion of the foetus, the whole of the back part of the pelvis was found to be occupied by the tumour, and the posterior wall of the vagina in an unhealthy state. After delivery there was great prostration, frequent vomiting, and a quick feeble pulse, with great restlessness. She was ordered to take a pill, with two grains of opium, every four or

six hours, and about every three hours a dose of mixture, consisting of Mist. Camph. Ammon. Carb., and Acid. Hydrocyan. As I saw her only once or twice after delivery, I am not able to say much about the symptoms or treatment after delivery.

4th, 10 a.m. She was not so restless; had dozed a little; passed urine twice; pulse 120; had vomited less frequently. She had taken only one pill and one dose of mixture. 5 p.m. Pulse 110; vomited only once since last report; very little lochial discharge; she still complains of severe pain in the right hip and iliac fossa. She gradually got worse, and died on the sixth or seventh day.

I was kindly invited to be present at the *post-mortem* examination, made December 11th. We found agglutination of all the abdominal and pelvic viscera; adhesion of the omentum to the uterus; a large sac in the right iliac fossa, ulcerated, and in a sloughy state, and communicating with the upper part of the vagina; the right side of the uterus, below the insertion of the round ligament, was also in a sloughy state; there was pus in the cellular tissue of the pelvis, and about the intestines; there was also some blood extravasated into the cellular tissue of the back part of the pelvis.

The tumour, together with the uterus, vagina, and bladder, weighed nearly four pounds and a half. The tumour measured six inches by four, and nearly three inches deep; it was hard and irregular on its surface. On making a section of it we found that it was made up of irregular and partially-developed cysts, some being cartilaginous, others of a softer texture. It was situated behind and below the peritoneum, placed between the rectum and vagina, and occupying the greater part of the pelvis. The vagina was very much elongated, and at its upper part, and on the right side, it was sloughy and ulcerated, commencing with the cavity or cyst in the right iliac fossa. The right ureter was traced over the anterior surface of the tumour. The ovaries were both atrophied.

I have little to offer in explanation of the cause or origin of the tumour. I think it probable that the nucleus of it was formed by an extravasation of blood at the time she fell down during the pregnancy preceding the one which proved fatal, the coagulum becoming organized, but for a time remaining inactive. When she again became pregnant a stimulus was communicated to the nucleus, which, together with the increased vascularity of all the surrounding parts, hastened its growth, and contributed to its rapid development.

General Retrospect.

SURGERY.

REMOVAL OF A DISEASED OVARY: CURE.

By Dr. Vaugiraud.

This is the first case of operation performed in France; it has proved successful, and may, we trust, give more popularity in this country to a mode of treatment which Dr. Clay's cases have rendered familiar to English surgeons.

CASE.—*Previous History.*—T. R., aged 25, men-

struated at 18; had enjoyed very good health until the year 1842, when the abdomen became enlarged and the menses irregular. These symptoms disappeared suddenly, and during fifteen months the patient did not suffer any relapse; but, at the expiration of that period, the abdomen became distended, and the menstruation deficient. On May 11th, 1844, paracentesis was performed for the first time, and twenty-five litres of transparent fluid having been removed, an ovarian tumour, of the size of the hand, was detected in the left iliac region. From that period forward, the dropsical collection formed with such rapidity and abundance that three days before operation paracentesis was again performed for the fifty-first time. Examination through the abdominal parietes indicated the presence of an oval tumour, extending from the left iliac fossa to the right hypochondrium; its surface was rough, and the tumour moveable.

Operation.—On the 15th September, 1847, the patient having inhaled æther, insensibility was produced in the space of seventy-five seconds, and an incision, three inches in length, was performed to the left side of, and in a parallel direction with, the linea alba; six or eight litres of fluid were permitted to escape, and the length of the incision increased to seven inches. The tumour, of the colour of wine lees, presented itself at the orifice, and, being of a soft consistency, was laid open, in order that its bulk might be diminished by the discharge of a portion of its contents, which were of a serous and puriform character. The pedicle was, as it had been predicted, found on the left side, and was divided, after two ligatures had been thrown round it. Very little blood was lost during the operation, and the wound was united by three sutures.

Progress of the Case.—During the two first days the patient felt remarkably well; she was even permitted to take broth and some wine and water. On the third day the pulse rose to 102, but the digestive functions remained unimpaired, and the intestinal evacuations regular. On the seventh day only the wound was examined; it had healed by primary union, excepting in its most anterior part occupied by the ligatures. On the sixteenth day the threads were removed, and the patient had almost completely recovered twenty-five days after operation.

The tumour weighed nine pounds, and the fluids which it contained were estimated at an equal weight. Its tissue seemed of a fibro-cartilaginous nature, in the intervals of which were found gelatinous, cerebriform, and granular textures. We regret that no chemical analysis of the fluids incarcerated in the growth was attempted, such fluids having been found occasionally to present cholesterine and albumen.

ON THE TREATMENT OF INTERNAL STRANGULATION OF THE INTESTINES BY STRYCHNINE.

By Dr. Homolle.

In this communication Dr. Homolle relates three cases in which he found very minute doses of strychnine (1 milligramme), repeated every hour, completely efficacious, after various other means had been tried in vain in relieving urgent symptoms of internal strangulation,

produced in two of the cases by the return of the hernia *en masse*, and in the other by violent vomiting. It was the knowledge he had of the favourable influence which strychnine exerts upon the peristaltic action of the bowels, in constipation from cerebral paralysis, hypochondriasm, &c., that induced him to employ it in the present cases. The borborygmi, the painless sense of vermicular movement, the rapid cessation of the pain and vomiting, and the expulsion first of gas and then of fæces, which resulted from its employment, confirmed the anticipations he had entertained. M. Amussat, who employs the conjoined force of two or more persons for the reduction of hernia, believes that in this way nine tenths may be reduced; but the taxis is, in point of fact, but the substitution of an external constricting force for the insufficient contraction of the walls of the intestine. The alkaloid by increasing defective, or by correcting irregular, persistaltic action, diminishes the volume of the intestine, and expels the detained fæcal matters, or removes invaginations. It is to be recollected that the obstacle in strangulation of the intestine is hardly ever materially insurmountable. So that this means sometimes may, associated with the taxis, even in strangulated hernia, prevent the necessity of resorting to an operation.—*L'Union Médicale*, 1848, Nos. 138-9, and *British and Foreign Medical Review*, April, 1849.

RETRACTION OF THE LEG: INSTANT CURE BY THE USE OF THE ACTUAL CAUTERY, AND FORCIBLE EXTENSION.

By M. Robert.

Two cases of great interest have been lately admitted into this hospital under M. Robert, of rheumatic affection of the knee, with contraction of the leg, and great pain in the joint, and which was immediately relieved by the use of the actual cautery, the patient having been previously chloroformed. In one case the subject was a robust country woman, about 45 years of age, who had for many months suffered with rheumatism in the left knee. The joint had acquired a great size, and the leg become gradually bent almost to a right angle. After having tried various remedies without any avail, she came to the hospital. On examination the limb was in the position just mentioned, and lay upon its outer side; the knee very large, half as big again as the other, and excessively painful upon the least movement or touch, with inflammatory engorgement in all the surrounding tissues. The patient suffered great pain, and could get no sleep night or day; it was evident that the disease was proceeding either towards complete ankylosis, or towards some other disorganization, from the fact of the abnormal position of the bony surface, and their progressive alteration, as well as of the neighbouring fibrous tissues, and the retraction of the muscles of the leg. M. Robert operated upon the patient in the following manner:—The patient was first placed under the influence of chloroform, and five or six stripes were made about four or five inches in length, with a red hot iron, around the affected joint. M. Robert next forcibly extended the limb, counter-extension

being made at the thigh, whilst the knee itself was acted upon, and the articular surfaces made to return to their normal position. After some effort the limb was brought back to its rectitude and natural length; it was then fixed in a metallic trough, extending from the calf of the leg to the thigh, and the wounds dressed. On awakening the patient found, with surprise, that her leg was extended and fixed in an apparatus. The pains of which she had complained before were gone, and she felt nothing but the smarting of the wounds.

Six weeks after the operation the wounds were healed, and the patient enabled to walk and support herself upon the straightened limb. The knee is still weak, enlarged, but not painful; pressure was applied to it, and the patient gets better and better. The articular movements, though still imperfect, increase more and more, and it is almost certain that in a little while the cure will be complete.

The other case was that of a man 40 years of age, who had long suffered from rheumatic affection of the left knee. The limb was equally bent and painful, as in the former case, though not so much swelled, and the same treatment was adopted in every respect, and with the same satisfactory result.—*Annales de Thérapeutique*, Mars.

REPEATED PUNCTURE OF THE BLADDER.

In the last number we related a case, where, after the day's interval, the bladder was punctured a second time above the pubes, for retention of urine, with stricture. The stricture continued impervious, and the patient died. On examining the body, *post-mortem*, a tumour was discovered in the belly, pressing on the neck of the bladder, which explained the retention, and the insurmountable character of the stricture. There was no effusion round the two punctures into the bladder, nor any suppuration or inflammation, so that one might say the double puncture had occasioned no accident, a fact of some practical interest.—*Id.*

HORNY GROWTH ATTACHED TO THE VULVA.

M. Vaudge relates the case of a female, aged 53, who was the subject of continual and severe pruritus vulvæ. She had, in addition, perceived for some time, a hardness between the labia, which gave her great pain, and interfered materially with her walking. On examination, a large round horny substance, resembling a corn, was found embedded in the mucous membrane separating the labia major from the nymphæ. It was moveable, and was excised without difficulty, when the pruritus ceased.—*Gazette Méd.*, 7 Avril.

MIDWIFERY.

DOUBLE UTERUS: SUPERFETATION.

A female, native of Modena, previously mother of six children, became pregnant for the seventh time in 1817. Nothing unusual was observed, with the exception that the uterus appeared to be unequally distended, a furrow being perceptible along the median line. On the 15th of February, 1817, she was delivered of a male infant at full term and well developed. The placenta was expelled naturally, and the woman

recovered her usual strength, but it was remarked that one half of the abdomen was still enlarged, and the movements of a fœtus could be distinctly ascertained. The patient continued in excellent health until March 14th, just a month, at which time labour ensued again, and she was a second time delivered of a male infant, living and well formed. In 1822 she became pregnant again and bore a child now living.

Various explanations were given of that extraordinary case, and amongst others it was considered as a case of superfetation, with double uterus, by M. Binogli. The justness of this opinion was verified last year by the death of the patient from apoplexy. On examination, the uterus was found to be double, with a single cervix. The preparation is preserved in the Hospital at Modena.—*Encyclograph Méd.*, Fev. 1849.

ON THE EMPLOYMENT OF COLD DOUCHES TO THE UTERUS.

M. Fleury communicated a memoir on this subject to the Académie des Sciences. His observations admit of the following summary:—

1. Cold douches will not cure uterine ulceration directly.

2. They are capable of inducing a revolution of engorgement and hypertrophy of the uterine neck, however chronic and rebellious to treatment they may be.

3. In favouring the revolution of the hypertrophied uterine tissue, cold douches assist materially in causing cicatrization of ulceration.

4. The cold douch will also restore several of the displacements of the womb, for which mechanical contrivances have been required, and becomes in this manner a means of removing sterility.

5. They, by giving tone to the uterus, and to the system in general, prove a prophylactic against abortion.

6. They are the best remedies for pruritus of the vulva and vagina.—*Gazette Médicale de Paris*, Mars. 11, 1849.

BENEVOLENT FUND OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

To W. Newnham, Esq., Treasurer of the Benevolent Fund, &c.

Andover Villa, Cheltenham,
March 21st, 1849.

Dear Sir,—As the time pointed out by you for communicating some proposal for the improvement of the "Benevolent Fund" of the Provincial Medical and Surgical Association is now fast approaching, I think it right to inform you, that in consequence of the continuance and increase of the neuralgic affliction under which I have so long laboured, I have been unable to devote myself sufficiently to the consideration of the subject to allow of my offering with confidence any improvement on the points I ventured to offer for your consideration last year.

I have no copy of the propositions I then made, but

to the best of my recollection the principal object of my recommendation was, to render the fund more useful for the relief and support of the members themselves, their widows and families, under circumstances of distress,—from sickness, death, or other causes, by which means the stimulus of self-interest would be brought into operation, to induce a greater number of the members of the Association to join the Benevolent branch, as it is evident, from the comparatively few of the nearly two thousand members who have as yet come forward for that purpose, that some more urgent motive than that which moved the charity of the “*good Samaritan*” is required.

God forbid that by this suggestion I should mean any portion of the fund, now appropriated for the purely benevolent “two-fold” objects to which the fund has hitherto been applied, should be diverted elsewhere, but on the contrary, by adding the stimulus of self-interest to that of pure Christian charity, to add so much to the fund, as a whole, as would enable the managers to appropriate a portion of it for that purpose more than equal to the sum now annually distributed; but to ensure the success of such a plan, it would be necessary that every member of the Association should contribute to this fund,—*i.e.*, that after a certain date, every member who may join the Association should be expected to do so, as a condition of his admission, but that it shall be voluntary with respect to those already enrolled.

It might be advisable, also, to extend the advantages of the fund still further, and render it more useful to those who, during their lives, may have no occasion for assistance, as the sum raised by so large a number of subscribers would be sufficient to allow of appropriating a certain portion of it to be applied in the manner of the “*Supplemental Fund*” of the Navy Medical Officers, by which every member would be enabled, if he thought proper so to do, to ensure his life for an annuity to his widow or orphan children, according to the calculations of the Swedish tables of the late Dr. Price.

The “*Supplemental Fund*” of the Navy Medical Officers at the present time affords the means of effecting an insurance of that kind at two-thirds of the amount set down in those tables, which is an advantage that many would be glad to obtain.

In order to bring such plan into immediate efficient operation, I should recommend, as I did in one of my letters to you last year, that an appeal should be made at the next general meeting of the Association, to the opulent members, to come forward with such donations as they can afford, for the benefit of those who have been less fortunate, in order that increased benefits from the fund may come into immediate operation.

A society composed of so large a number of gentlemen, being members of a profession who, as a body, stand equal to any in the world, for education, science, intellectual refinement, and christian charity, ought to make those qualities conspicuous in all their undertakings, and not confine them simply to the exercise of the duties of their profession, but with equal kindly bearing, charity, liberality, and benevolence towards each other.

If you think the rules and regulations for the establishment and management of the “*Supplemental Fund*” of the Medical Officers of the Navy would be of any use to you, I shall be happy in sending them, together with Swedish tables.

Hoping you will not let the next general meeting of the Association pass without previously preparing the members for the consideration of this important subject, and laying some effective plan before the body so assembled suitable for the attainment of the desirable objects now in question,

I remain, my dear Sir,

Yours very truly,

JAMES HOLBROOK.

ON THE INFLUENCE OF THE MOTHER ON THE FŒTUS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND
SURGICAL JOURNAL.

SIR,

The communication of a paper in your Journal of March 7th, from Dr. Butler Lane, respecting the supposed influence of the mind of the mother on the fœtus, has brought to my recollection a curious fact which occurred under my observation. Some years since I was required, in the performance of my duty as Medical Superintendent of Quarantine at this port, to visit one of the “*packets*,” on her return from a Brazil voyage. On mustering the crew, I found one absent, and on inquiring the cause, I was informed that the man had sustained a severe injury of the spine from falling down the hatchway, was paralyzed in both arms and legs, and could not be brought on deck without much trouble.

A communication was quickly made by some good-natured friend to the wife of this poor fellow, who was then in the fifth month of her pregnancy, that he was killed; but somewhat of a more correct account was shortly after brought her, that her husband was not killed, but had *lost both arms and legs*.

The woman at the proper time gave birth to a fine male infant, without *legs or arms*; in every other respect well formed. The child lived about two years, was exhibited as a show, and was a remarkably handsome boy. The shoulders were beautifully rounded without the vestige of a humerus, but from one groin there was protruded a great toe, and from the other groin two of the smaller toes, in all of which the child had perfect flexion.

It is fair to state, that the mother herself did not refer the cause of the child's dismemberment to the shock she experienced of hearing of her husband's accident, but to having been previously frightened at seeing a turtle! The coincidences are in every way curious, and deserving of investigation.

I have the honour to be, Sir,

Your obedient servant,

JAMES CORNISH.

Falmouth, April 23, 1849.

Medical Intelligence.

PRESENTATION OF A TESTIMONIAL TO DR. FORBES.

The Committee appointed at the general meeting by the subscribers to the Forbes Testimonial, to expend the sum collected, in the purchase of a piece of plate, presented this Testimonial to Dr. Forbes on the evening of the 3rd of May. The Committee invited the subscribers in London and its vicinity to meet them on the occasion, and nearly one hundred professional gentlemen obeyed the summons. The Testimonial consists of a very handsome piece of plate, a candelabrum and epergne, beautifully designed and executed by Messrs. Smith, of Duke Street, Lincoln's Inn Fields. The stem is supported by three figures, representing Industry, Health, and Hope, corresponding to Dr. Forbes' motto, "*labore robore spe.*"

Mr. Stanley, President of the Royal College of Surgeons, presented the Testimonial to Dr. Forbes. After a short allusion to the circumstances in which the subscription originated, Mr. Stanley proceeded to read the following address, framed by the Committee in accordance with the resolution passed at the general meeting:—

Sir,—“On the occasion of your relinquishing the editorship of the *British and Foreign Medical Review*, it was felt by many of your friends and the admirers of that journal, that a proper opportunity had arrived for expressing to you their sense of the deep service you had rendered to medical science, by the spirit and method in which, for twelve years, you conducted that important and influential publication. It would be out of place to enter here into any statement of the mode in which that journal was conducted, or into any estimate of the great influence it from the first excited on English medical literature,—an influence, we may add, which still continues, and which is not likely soon to pass away. Suffice it to say, that you brought to the task of editorship intellectual and moral qualities of so high an order, that your Review was at once placed in the foremost rank among the journals of periodical criticism, both medical and general. It was impossible that such a journal should cease to appear without some acknowledgment on the part of those who had so largely benefitted by it. It would have been an act of injustice if no record of regret had been entered to mark the close of its useful and honourable career. A subscription was therefore opened, to present you with a Testimonial, in expression of the sense of your professional brethren on the occasion; and the rapidity with which the lists were filled, testifies to the esteem with which you are universally regarded.

“We may be permitted also to add that we do not present this Testimonial only to the late editor of the *British and Foreign Medical Review*, but also to the man whose excellent moral character is no less remarkable than his wisdom and sagacity; to the physician who has played an important part, and filled many important positions, without ever forgetting that life

is a sacred trust, which we are bound to keep pure and unsullied; to the physician who is, if any one is, a pattern to the younger members of our profession, of truthfulness, manliness, and sincerity.

“We will not occupy your time further than to give expression to the earnest prayer of this assembly, that many years may be permitted to you to enjoy the honour which your professional brethren now offer you.”

Mr. Stanley then said—In the sentiments expressed in this Address, Dr. Forbes, I most heartily concur, and I am happy that it has fallen to my lot to discharge the pleasing duty of presenting it to you. It is a most gratifying circumstance to me individually to find that the merits of one whom I esteem so highly have drawn forth this public expression of gratitude and regard; and, on public grounds, I cannot but rejoice that the services which have been so well and so manfully rendered have met with spontaneous and immediate recognition.

Dr. Forbes replied—I have, Sir, on many occasions regretted that I did not possess the happy art of giving appropriate words to feelings which demanded utterance, and never have I regretted it more than on this occasion. But I console myself with the thought that it is not for making speeches, for throwing easily vivid thoughts into eloquent words, that so many of the most eminent of my professional brethren have assembled here this evening to confer on me this great honour, but for a strenuous endeavour to discharge a duty which I had assumed, and to fulfil the tacit guarantee into which I entered when I became the editor of a journal of periodical criticism. And on this ground I do not refuse the honour you offer me; I do not deny that when I established the *British and Foreign Medical Review* (although I did not altogether exclude personal and private considerations) I did so mainly on public grounds, because I thought such a journal was wanted, and would do good service to the profession. But, Sir, I cannot permit myself to assume all the merit you have attributed to me in the too flattering address you have now read. The merit of the journal which I lately conducted, of its literary pretensions, and of its philosophical acumen, is not due to me, but to the band of admirable contributors whom I was enabled to assemble round me. In their names I will not refuse the terms in which you have been pleased to speak of that journal. I may have appeared as an occasional contributor, and more frequently as the reviser or corrector of the criticisms of others, but the chief part of my duty was to see that the works of authors went into competent and impartial hands, and were criticised by men who, as far as I could judge, were the most likely to give a true and unbiassed account of their contents. And, Sir, I believe that, as far as is possible, the criticisms in the *British and Foreign Medical Review* were able, were honest, were unstained by feelings of petty rivalry, and untarnished by the bias of personal enmity. It was at least my intention to make them not only sound in philosophy, but also just as to the author's merits. That my endeavour was, at any rate, partially successful, I have the high gratification of feeling

this evening, Sir. That magnificent piece of plate, valuable as a mere mass of metal, valuable as a work of art, has yet to me a value of a different kind, which is not to be measured by gold, nor supported by the most perfect of human productions. The editorship of the *British and Foreign Medical Review* was to me no ungrateful task: it was not performed with pain and repining; on the contrary, it was a pleasure to me, a gratification of all my faculties, a true labour of love. But had it been otherwise,—had it been, indeed, a hard task performed with sighs, and urged by painful necessity,—I should have been repaid for it now. Now I should have received my reward, and have taken the vantage ground from fortune. For a man may be justly proud when he finds his labours thus rewarded, by the approbation of many of the most eminent of the profession, not only in this country, but also in America—that mighty state which is indissolubly connected with Great Britain by so many ties of common interest. That Testimonial, Sir, shall be to me the dearest of my possessions: whatever may happen to me, from it I will not be separated; and it shall be cherished by my children when I can receive no more pleasure from it.

I feel, gentlemen, that I have most imperfectly expressed my grateful feelings towards you. You will understand what it is not easy to put into words. Permit me, Sir, to acknowledge the kind terms in which you individually have spoken of me, and which, from you, are words indeed of worth.

Dr. Forbes was loudly applauded by the audience, and shortly after the conclusion of his speech, the meeting separated.—*Medical Gazette*.

BENEVOLENT FUND.

As the accounts of this fund are rigorously closed on the 30th of June in each year, and as there still remain a few subscribers in arrear of their present year's subscriptions, an *immediate remittance* of the same is most earnestly solicited.

Gentlemen who would kindly be willing to undertake the office of Local Secretaries, in their respective districts, are requested to communicate their names to

WILLIAM NEWNHAM, Esq.,

Treasurer and Hon. Sec.

Farnham, May 29, 1849.

APPOINTMENTS.

Mr. John Birkett was appointed Assistant-Surgeon to Guy's Hospital, on the 23rd instant.

M. Bérard has been appointed a member of the Committee for the Inspection of Hospitals in Paris.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members, Friday, May 18th:—Messrs. W. Henderson; N. S. Wood; S. Whitlow; S. Partridge; C. A. Poole; R. Creighton; H. D. Smith; T. T. Frankland; T. C. Marrett; F. J. Gant; T. L. Ridley; G. Wilson.

OBITUARY.

Died, May 18th, aged 30, of fever, W. L. Grundy, Esq., one of the Poor-law Medical Officers of the Wolverhampton Union.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

NOTICE TO MEMBERS.

Gentlemen who have not yet paid their subscription for the current year, or who are in arrears, are requested immediately to forward the amount due to the Secretary or Treasurer of the Association, as the accounts are now about to be made up for the Annual Meeting.

* * As the list of Members is about to be published in the next Volume of the "Transactions," gentlemen whose addresses are not correctly stated in the last volume, are requested to forward the alteration immediately to the publishers, Deighton and Co., Worcester.

J. P. SHEPPARD,

Secretary to the Association *pro tem*.

TAUNTON AND SOMERSET BRANCH MEETING.

The Annual Meeting of the Members of this Branch will be held at Pattison's Castle Hotel, Taunton, on Wednesday, the 13th day of June next. G. Brock, M.D., President; H. Alford, Esq., F.R.C.S.E., President-elect. The Chair will be taken at 2, p.m.

FRANCIS HENRY WOODFORDE, M.D.,

Honorary Secretary.

Taunton, May 26, 1849.

SUFFOLK BRANCH MEETING.

The Anniversary Meeting of the above branch of the Association will be held at Hadleigh, on Friday, the 15th of June.

Members of Council will meet at the residence of the President Elect, John Growse, Esq., at one o'clock, and the chair will be taken at the general meeting, at two o'clock precisely.

Those members who cannot attend will oblige me by forwarding any communication they may wish to be brought before the meeting. Short papers or interesting cases will be acceptable. Dinner at five o'clock.

The contiguity of Hadleigh to the county of Essex will, we trust, be taken advantage of by members of the Association, or their friends, residing in that county.

C. R. BREE, Hon. Sec.

TO CORRESPONDENTS.

Communications have been received from Dr. Toogood; Dr. Copeman; and Dr. Norris.

In consequence of the lamented death of Dr. Streeten, it is requested that all letters and communications be sent to J. H. Walsh, Esq., Foregate Street, Worcester. Parcels and books for review may be addressed to the care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON SURGERY,

DELIVERED IN THE

MEDICAL SCHOOL OF CAMBRIDGE.

By GEORGE MURRAY HUMPHRY, Esq., Downing
College, Surgeon to Addenbrooke's Hospital.

LECTURE IX.

ULCERATION CONTINUED: MORTIFICATION.

Phagedenic Ulcers, their General Characters; are often of Specific Nature; Cause of the Ring or Crescent Shape; Treatment by Caustic; Specific Remedies; Tonics and Opium.—Atonic Ulcers, their General Characters; Circumstances under which they occur; Treatment.—Mortification, its relation to Ulceration; the two often conjoined; Classification of the cases of Mortification into Inflammatory, Phagedenic, and Atonic.—Inflammatory Mortification: Symptoms, Local and General; Resistance of Different Tissues; Treatment.—Sloughing Phagedena; Symptoms and Treatment.

The acute and chronic inflammatory ulcers which I described to you in the last lecture constitute the great proportion of this class of diseases; they are, for the most part, simple in their nature, and the indications for their treatment are generally obvious. Though often very tedious and troublesome, they scarcely deserve to be regarded as difficult cases. I gave the name *inflammatory* to them, because they evince, in the rate of their progress, a greater correspondence with the severity of the accompanying inflammation than do the ulcers we are now about to consider, and the treatment of them consists in the employment of the various means which are used to combat inflammation in its acute and chronic stages.

In the second class of ulcers to which I would now direct your attention, the correspondence between cause and effect,—between the inflammation and the ulceration, is not so manifest. The latter is observed to be out of proportion to the former. The distinguishing character of these ulcers is their tendency to increase without being accompanied by any sufficient apparent cause for so doing. They go on spreading from point to point, as if they possessed an independent power of growth, and as they proceed, they eat away the integuments and subjacent parts, which may look quite healthy, and may present scarce any trace of

inflammation up to the very edge of the ulcer. I do not mean to say that these ulcers really take place without inflammation, or that the destructive process is less directly dependent on inflammation in them than in other ulcers, but merely that the ulceration is so greatly out of proportion to the inflammation, that the latter seems rather a secondary feature than an exciting cause. The term *phagedenic*, which is applied to these ulcers, is expressive of this eating or destructive tendency so strongly marked in them. They are very often the result of some specific disease, as syphilis, the influence of which seems, to a certain extent, to modify the ordinary course of the inflammation, and to impress peculiar characters upon the ulcer.

Phagedenic ulcers are generally of circular or crescentic shape, and they sometimes exhibit a remarkable tendency to spread in one direction, while they are healing in another. Thus the reparative processes of granulation and cicatrization are often observed to be going on from some remaining insular fragments of cutis, which have escaped destruction in the middle of the ulcer, at the same time that the work of destruction is proceeding at the circumference; and when the ulcer is of crescentic shape, cicatrization is generally advancing on the convexity, while the ulceration continues to make way in the concavity of the crescent. The destructive and reparative processes thus going on together, and keeping pace with one another have the effect of gradually enlarging the circle of disease—it may be, without increasing the interval between the ulcerating and the healing lines. Moreover, these ulcers are generally superficial, creeping along the skin without extending through the subcutaneous tissues; and, although they continue to spread at their circumference, the abundant granulations on their surfaces, forming, perhaps, at the same time, show the reproductive forces to be in full vigour at one part, while the work of destruction is going on at another.

This disposition to assume a circular or crescentic shape, and to heal at the centre, while they spread at the circumference, though often strongly marked in syphilitic ulcers, and forming, therefore, a suspicious symptom, is not altogether peculiar to them. The circular is the natural shape assumed by inflammatory affections of all kinds, which commence at a single point, and radiate from it. It is liable to be modified by the unequal resistance of the tissues to the spreading of the inflammation, and by various accidental circumstances, and is generally best marked when the disease

increases slowly. The central healing and circumferential spreading of an inflammation upon which the crescent or ring-shape depends, has its analogy in the fairy rings upon grass, and is observed in other inflammatory affections besides syphilis. It is no uncommon occurrence in scrofulous ulcers, and is the cause of that disease being very often confounded with syphilis. Herpes circinatus, or ring-worm, and lepra (common, not syphilitic lepra, for I believe the spots of the latter do not attain sufficient size to assume the ring-shape,) are familiar examples of the same thing. The peculiar shape and mode of increase in these cases probably depend upon the tendency which inflammation, in common with other diseases, have to run their course, and fade away, on the one hand, and to communicate their noxious influence to neighbouring parts on the other. Thus an inflammation attacking a given point in the skin, runs its course in due time, and subsides at that point; but it has, in the meantime, infected the surrounding integuments, proceeds through the same course in them, and is from them propagated to a greater distance. In this manner a spreading circumference is established around a healing centre. Such mode of increase is most likely to be observed in specific affections, because the disease, depending upon a poison or some extraneous cause, falls upon structures otherwise healthy, and has an opportunity of exhibiting its natural disposition, uninfluenced by the many causes which, under ordinary circumstances, combine to modify it. If this view of the subject be correct, the peculiar shape of phagedenic ulcers is due to the natural unrestrained tendencies of the ulcerative process, rather than to the exercise of a specific influence.

Inflammatory affections are observed to assume the ring or crescent shape chiefly when they depend upon some morbid condition of the circulating fluids, or upon some depraved state of the constitution, doubtless, because they are then least likely to be modified by local influences. Lepra, herpes, some of the forms of roseola, and erythema, and occasionally scrofulous inflammation, are instances of this, and it is probable that the shape of the secondary syphilitic ulcer has a relation to the mode in which the poison of syphilis is propagated through the blood, rather than to the quality of the poison itself. This inference seems to be justified by a comparison of the syphilitic ulcers with the diseases just referred to, for they all agree with one another, and with the secondary ulcers of syphilis, in a disposition to assume the ring or crescent shape, and they all appear to depend upon some morbid condition of the blood, with the exception of scrofulous inflammation, which probably owes its peculiarities to a particular state of the constitution. The primary syphilitic sore, though of specific nature, as shown by its effects, is a local disease dependent on a local cause, and displays nothing remarkable in its shape.

It generally happens in an ordinary ulcer, that the integuments have been quite destroyed in the middle of the sore, so that although granulations may rise up in the centre while ulceration is going on at the margin, cicatrization can proceed only from the circumference; whereas, in the secondary syphilitic ulcer, which com-

mences often with a cluster of minute points, small fragments or islands of incompletely destroyed cutis remain in the middle, and become nuclei, from which the cicatrization may radiate, and this central healing taking place co-temporaneously with the circumferential spreading, gives the peculiar shape we have been discussing.

Phagedenic ulcers are often very painful, the pain being of a sharp gnawing kind. It is severe in proportion to the rapid spreading of the ulcer, and ceases as soon as the process of destruction is brought to an end.

In the first class of ulcers which I described to you, inflammation is the leading feature, and the treatment is regulated accordingly; but in the phagedenic cases, where ulceration is so predominant as in a manner to constitute the disease, we do not proceed by the circuitous course of endeavouring to control the inflammation, but at once attack the disease in some more direct manner. With this view, caustics are applied, and often successfully, to phagedenic ulcers. The disease is by this means literally burnt out. The ulcerating structures are converted into a slough, which separates in the usual manner, and the healing processes succeed. A primary syphilitic sore may be thus exterminated if the treatment be adopted before it has become indurated, and before it has had time to infect the system. The nitrate of silver is not generally sufficient to effect this; it rather increases the spreading than effects the eradication of the sore. Some stronger caustic, such as nitric acid, or potassa fusa, must be employed. The spreading of larger phagedenic ulcers not of primary syphilitic nature, may be sometimes stopped by touching their edges lightly with nitric acid; and you have had repeated opportunities of witnessing the good effects of applying nitrate of silver, in substance or strong solution, to acute ulcers of the cornea, which are not attended by a sufficient amount of conjunctival inflammation to correspond with the severity of the disease.

The exhibition of mercury in sufficient quantity to affect the system, generally succeeds in stopping the primary phagedenic ulcers which have advanced too far for the application of caustic. The same remedy is much less beneficial when the phagedenic ulceration occurs in the subsequent stages of syphilis; indeed, it is then rather injurious. The iodide of potassium is in such cases no less a specific remedy for the syphilitic disease than the mercury is found to be in its primary stages. I believe that both these medicines in course of time lose their influence, and if the disease outlives that period, it is exceedingly difficult to control.

Phagedenic ulceration occurs most frequently, and advances with greatest rapidity in persons of feeble or debilitated constitution, the reduced vital powers of whose tissues are unable to resist the destructive progress of the disease. Patients who are suffering under what is called the tertiary stage of syphilis, in which phagedenic ulceration of the skin and fauces constitutes a prominent feature, are often in a very low state of health. I believe that the long continuance of the syphilitic poison in the system exerts a directly enervating influence upon the bodily powers, which has

much influence in reducing the patient to the cachectic condition so often attendant upon the later, and sometimes even accompanying the earlier stages of the disease; and if the specific remedy for the syphilis have not lost its effect, it will be found, in such cases, the very best means of combating the cachexia. I have often known patients loaded and oppressed apparently with the poison of syphilis, improve greatly in health, and resume their lost vigour as the disease faded away under a carefully conducted mercurial course. In this tertiary stage of syphilis, however, when debility is associated with phagedena, a tonic regimen, nutritious diet, sea-side air, and tonic medicines, such as sarsaparilla, nitric acid, and cinchona, are powerful adjuncts to the specific remedy, and, when the latter has lost its influence, we are obliged to rely exclusively upon these measures for invigorating the system, so as to enable it to withstand or throw off the noxious poison.

When the patient is anxious, irritable, and sleepless, and the spreading ulcer is painful, much benefit is likely to attend the administration of opium. It should be given in sufficient quantity to ensure sleep at night, and it is sometimes advisable to give it in repeated doses during the day. It sometimes acts like a charm, and, in combination with tonic medicines, has acquired the reputation of a specific in some of these cases.

In our third class of ulcers,—the *atonic*, ulceration is out of proportion to the accompanying inflammation in consequence of the enfeebled condition of the patient, the vital powers being reduced to so low an ebb that the tissues are unable to maintain their integrity, under circumstances which, in the healthy state, would have failed to produce a destructive impression upon them. One person receives a wound, and it heals up readily and quickly; but in another, and more feeble patient, the surrounding textures being unable to bear the slight disturbing influence of the inflammatory action which accompanies the healing process, give way and ulcerate, and the wound, instead of closing, becomes larger. Hence, the troublesome ulcers caused by wounds in the extremities of old people, in anasarous limbs, and in persons greatly reduced by illness or starvation. This disposition to ulcerate rather than to heal is no uncommon cause of death after the amputation of diseased joints and limbs, when the patient's strength has been greatly reduced before the operation is performed. It may be that the stump never heals at all, the slight inflammatory disturbance necessary for reparation, producing a destructive effect upon the enfeebled tissues from the very first. Or, supposing the healing process to have commenced, if any slight accident, such as the loss of a small quantity of blood, a diarrhoea, or disordered state of stomach occur, which lowers the patient's strength a little further, the bond of union is very likely to give way, and ulceration takes the place of reparation. A patient in this hospital underwent amputation in the thigh on account of a severe disease in the knee joint, with extensive suppuration, which had reduced his strength very much. The operation was performed with little loss of blood, and abundance of soft parts

were left to cover the bone; but the stump healed only in part; abscesses formed in it, and after a time, the bone projected through the wound. Such tonic medicine and nutritious diet was given as his stomach was able to bear, but he never made a fair start on the road to health; the quick pulse, hectic sweats, and an open stump remained. After he had lingered in this way for a considerable length of time, inflammation occurred in the opposite femoral vein. This was followed by the appearance of an ulcer on the inside of the stump taking place without any apparent local cause. The ulcer spread rapidly, so that in ten days it was as large as a cheese plate. Its surface was grey or ashcoloured, and sloughy, and there was very little inflammation in the skin immediately surrounding it. It was a well-marked specimen of an atonic ulcer, and I need scarcely add that the patient soon died.

Some of you may remember a pale, haggard, emaciated woman, aged 54, with diarrhoea, small quick pulse, parched lips, and glazed apthous tongue, who was admitted into Anne's Ward several months ago, with extensive ulcers, of the atonic kind, on the left lower extremity below the knee. They were covered by soft grey sloughs, and in places where these sloughs had separated, the muscular fibres were exposed, uncovered by granulations. A copious creamy offensive discharge issued from the ulcers. The surrounding integuments were pale, not much inflamed, and when slight inflammation occurred in the course of the femoral absorbent vessels, it was very quickly followed by the formation of abscesses and ulcers, similar to those in the leg. She had long been subject to ulcers in this leg, but the deplorable condition in which she was admitted into the hospital, appeared to have commenced three or four months previously, with loss of appetite, and general failure of strength, after which the ulcers in the legs began to spread rapidly. Stimulants and nutritious diet failed to impart any vigour to her shattered frame, and she died soon after her admission. The internal organs were sound, but bloodless.

These atonic ulcers occasionally present the character which I have mentioned as appertaining to the phagedenic class. There is at this time in Martha's Ward a pale, feeble, emaciated woman, whose lower extremities are the seat of ulcers, of a peculiar kind. In the early stage they were covered by thick yellowish secretion, forming a crust or scale upon them. They were all superficial; several of them had an ulcerating edge in one direction, although they were healing at other parts, and although their surfaces were covered by large flabby granulations. Some were healing at the centre, and spreading at the circumference, and others were of crescentic shape, with cicatrization at the convexity, and ulceration at the concavity of the crescent, simultaneously proceeding. There were also at the time of her admission superficial ulcers of the scalp over the coronal suture, and some symptoms of disease of the frontal bone. Though the appearances of the ulcers were very suspicious, we could not obtain any history of syphilitic disease, indeed the evidence is strongly against it. She is a respectable married woman, with five children, the youngest of which, a

year old, had been weaned three months. She states that at the time of weaning this child her breast became sore, this was followed by an abscess in the axilla, which made her very weak. The ulcers upon the head and lower extremities began soon after, and have been on the increase ever since. At first, under nutritious diet, with small doses of the iodide of potassium in decoction of sarsaparilla, the healing of the ulcers went on very favourably, though the cicatrices were thin and delicate, without contractile power. Lately, however, her health has declined again, the ulcers have, in many places, re-opened, and she is in a worse condition than before. I cannot, of course, be quite certain of the absence of a syphilitic taint in this case, but I think the probabilities are against there having been any disease of that kind; and I have before mentioned to you that the ring or circular shape is not a certain evidence of the specific nature of an ulcer. However, whether the disease in this case be syphilitic or not, it is an instance of the association of phagedenic ulcers, with a cachectic state of the system, which I before mentioned to be of frequent occurrence.

The aphthous sores frequently affecting the mucous membranes of persons who are greatly exhausted by long-continued disease, are also examples of the atonic class of ulcers. So are the ulcers sometimes occurring upon the feet and legs of old people, the ulcers of scurvy, and ulcers affecting limbs weakened by paralysis or other disease.

In the treatment of this class of ulcers our attention is directed to the means best calculated to promote the general health; but, as in the cases which I have related to you, the condition of the patient is generally so miserable and cachectic, that our best efforts are unavailing.

These three classes which I have now described, (the inflammatory, the phagedenic, and the atonic,) will, I think, be found to include all the various ulcers, with the exception of such as depend upon a peculiar cause,—for instance, syphilis, malignant disease, or a scrofulous habit of body.

By the term mortification, we mean the death of a part of the body which is generally preceded and occasioned by some change in the vital actions of the part, wherein it differs from simple death, or death consequent on amputation, or the decease of the entire body. It is indicated by loss of temperature and change of colour. The limb affected becomes cold, and of a mottled, livid, or black colour, the cuticle being at the same time vesicated in places, or detached. When the change is confined to some of the textures only, they more frequently assume a grey or ash colour, and become soft or sodden, as if from the infiltration of fluid into them. The terms *spacelus*, *gangrene*, and *sloughing*, are applied almost indiscriminately to this condition, at any rate the distinctions between them are not very accurately observed.

Ulceration and mortification differ from one another in degree rather than in kind. In the one the death of a part takes place slowly, *piecemeal*, or by atoms; the other is more rapid in its progress, does its work of destruction upon larger masses at one time, entire structures, or even a whole limb, dying at once, *en*

masse. Both are also the result of the disturbing agency of inflammation upon the tissues. They are, therefore, alike in their nature, and dependent upon the same cause, and we should expect to find them treading closely upon each other, the one continually advancing into the other, and both proceeding together in the same part; and so it is, for we very seldom see ulceration going on with any great activity without its being accompanied by mortification of the affected tissues, to a greater or less extent. The ulcers in which mortification is thus combined with ulceration, are called "sloughing ulcers." Their only peculiarity consists in the rapidity with which the work of destruction is carried on, and the treatment of them is to be conducted upon the general principles which I described to you in speaking of the treatment of ulcers. If a poultice be placed upon the part, (and it is generally the most desirable, as well as the most comfortable application,) some detergent or cleansing preparation may with advantage be added to it, such as chloride of lime or charcoal, which, by destroying the noisome products of the disease, exerts some influence in arresting the disease itself.

Sloughing is most likely to occur in the ulcers which are attended and occasioned by acute inflammation, and in the atonic ulcers. The latter class of ulcers, indeed, very often seem to spread rather by sloughing than by ulceration. It is also to be remarked that the textures of low vital power are more liable to mortification than to ulceration. This is true of fibrous textures and of bone; so that when an ulcer has penetrated through the skin and subcutaneous tissues down to a fascia or tendon, those structures generally mortify and are separated as soft, sodden, greyish masses. Inflammation of a bone, especially if it be at all acute, is more commonly followed by necrosis than by ulceration, and ulcers in bones are generally attended with more or less of necrosis. Again, ulcers in cicatrices and in textures indurated and otherwise altered and weakened by previous inflammation, advance rather by sloughing than by ulceration. An injury which would occasion a slight ulcer in a young or middle-aged person, may cause severe mortification in the foot of an old man. All this agrees with the statement I have before made to you, that the destructive effects of inflammation are most marked and most rapid in persons and tissues possessed of the lowest vital powers.

Moreover, as on the one hand, mortification is the usual attendant on the more severe stages of ulceration, so, on the other, does ulceration generally accompany the milder forms of mortification; and when the latter has ceased to proceed ulceration continues to finish the work which it had begun. In this manner ulceration exerts a benign influence. By separating the dead parts it clears away the foul products of mortification, and leaves a clean surface on which reparation may proceed.

The several instances in which mortification occurs may be advantageously classed in three divisions, corresponding to those into which we separated the different kinds of ulcers. The first class comprises the cases in which the mortification manifestly depends

upon, and is proportionate to, the attendant inflammation. In the second class we will consider those cases, not of very frequent occurrence, where the mortification is disproportionate to the inflammation, and seems to spread in consequence of some peculiar quality in the disease; and, thirdly, the more numerous instances in which the mortification, in its severity, exceeds the severity of the accompanying inflammation, by reason of the low vital powers of the person or part affected. We have, therefore, simple or inflammatory, phagedenic and atonic mortification.

In the first class of cases the inflammatory process attains to such a degree of violence that it not only renders the nutritive fluids unfit for their purpose and stops the process of nutrition, but it also annihilates the vital properties of the part affected and reduces it to a lifeless mass. Function of every kind, nutrition, and secretion are suspended, and the tissues become subject to the decomposing tendencies of compound structures; or they may be dried and charred to a cinder. The first symptoms which attract our attention when inflammation is about to pass into mortification are a change of colour and a loss of temperature. The bright red colour and burning heat of acute inflammation are succeeded by a dull red, blue, or livid hue, indicating the languor and difficulty of the capillary circulation. At the same time the part begins to feel cold, relaxed and flabby; and it is generally infiltrated with thin reddish fluid. The acute sense of pain, perhaps, begins to subside, so that judging from the pain which may have been a prominent symptom, and to the patient the most important one, the attendants are likely to be misled into the idea that the inflammation is giving way, and that an improvement has commenced. (This is particularly likely to happen when the inflammation attacks an internal organ, the indirect symptoms resulting from it being then the only means by which we can form an estimate of the changes that may be in progress.) As the mortification advances the cuticle becomes detached, vesication perhaps takes place, and the part assumes a mottled colour, then becomes dark, blue, leaden, brownish or even black; it is cold and flaccid, a dirty, thin, bloody fluid exudes from it, and sensation is quite destroyed. Decomposition quickly following, gases are generated, occasioning a crepitating feel and a fætid odour; the textures become stained of an uniform dull livid hue from the transudation of the colouring matter of the blood, and they are rendered soft and sodden so that they tear like wetted paper.

While the inflammation is thus at one place advancing to the complete destruction of the textures, the surrounding parts may exhibit the several changes above described proceeding at different points. The brownish black colour of the dead and decomposing structures may be shaded off at the circumference into a livid, blueish or mottled appearance, and this again may pass in the same manner by easy transition into the bright red colour, and the burning heat of acute inflammation still raging in the most distant parts. So that there is no abrupt line of demarcation between the inflammation and the mortification; the one is by imperceptible degrees advancing into the other. While

this is the case we know that the mortification is extending and we cannot tell where it may stop. As soon, however, as the destructive process is arrested, either in consequence of a diminution of the intensity of the inflammation, or from the greater vitality of the textures involved in it, then the intermediate livid shades begin to disappear, and a well defined line appears between the living and dead parts. The contrast between the two is very remarkable, because the black slough is surrounded by the inflamed integuments whose bright red colour extending to the very edge of the slough shews that they have not yet begun to lose their vitality.

The mortified part may now be regarded as a foreign body, which by its presence maintains a sufficient degree of inflammation in its circumference to effect the removal by ulceration of the tissues in immediate contact with it. So that in the line of demarcation between the dead and living parts, a narrow groove of ulceration takes place, and extends more and more deeply till it has completely detached the mortified part. This ulceration occurs, of course, in the living textures contiguous to the slough; for the dead structures cannot undergo changes which are the result of a modification of the vital powers. The time required for the complete separation of the slough varies a good deal; in vascular and highly organized textures, as the skin and mucous membranes, it is quickly effected. The slough of a caustic issue comes away in a few days. When the mortification has attacked a limb, and the ulceration has to make its way through all the structures before the slough can be separated, it is a work of some months; for the fasciæ, tendons and bones are, as you know, very resistant to the ulcerative process.

When the slough has separated, the ulcer granulates and heals up like any other sore; and it often does so very quickly, because the inflammation which occasioned the mortification having been active in its progress, has left little induration or other traces of its injurious effects upon the surrounding parts. There is, therefore, nothing to impede the contraction of the ulcer, and the work of reparation generally goes on briskly also.

The effect produced upon the constitution by the transition of inflammation into mortification is very marked, and is proportionate to the extent of the disease, and the importance of the part affected. The change in the constitutional symptoms corresponds closely with that of the local phenomena. A state of great depression follows upon that of much excitement. There is general listlessness and prostration of strength; the countenance becomes sunken, leaden, and cadaverous; the surface of the body cold, flaccid, and clammy with perspiration; the pulse quick, feeble, hesitating, or intermitting; the tongue moist, flabby, and cold; the secretions, with the exception of the perspiration and a few others, stopping, and the intellect wandering. These symptoms of depression are the worst that can occur in the course of an inflammatory affection, for they indicate, either that the local disease has gone on to its most destructive results, or that it has attacked an organ of such importance

that the constitution is unable to bear the sympathetic disturbance excited by it. It does not necessarily follow that mortification has commenced, for we find the symptoms of depression sometimes accompanying even the early stages of inflammation of a vital organ, or of the peritoneum. They are more easily induced by the inflammatory affections of old people than in the young and vigorous; but under any circumstances they are alarming symptoms, for, whether the local disease be severe or not, they shew, at any rate, that the constitution is ill able to bear it. And when the inflammation is seated in an internal organ, and so out of sight, they demand our serious attention, because they may be the only warnings that reach us of the terrible mischief which is going on within.

The mortification consequent on acute inflammation is not often very extensive, unless there be some peculiar circumstances connected with it. It commonly affects tissues rather than limbs, and, as I have before mentioned, it affects most easily those tissues whose vital powers are the least active; thus, in cases of severe inflammation of the fingers, the tendons and the phalanges are the parts whose vitality is first destroyed. The cellular tissue is very prone to mortification, and so is the skin in a less degree. When the mortification is limited in its extent, the sloughing tissues generally present a grey or ash-colour, instead of being livid or black.

Blood-vessels resist mortification a very long time, and may be sometimes found unchanged when the surrounding tissues are sloughing extensively. When they begin to suffer, the blood usually coagulates in them, and the coagulation may extend for a considerable distance above the mortified part, so as to plug up the tube, and prevent any loss of blood when the slough is separated by the ulcerative process. This coagulation does not always take place in mortifying vessels. Thus, in cases of acute gangrene of a limb, the blood is generally found to be fluid, and the tissues are stained by the transudation of its colouring matter. It seems that the blood and tissues all perish together when the mortification is thus rapid, there being no time for the coagulation of the blood to take place; just as in sudden death from electricity or any other severe shock, which is felt throughout the whole frame, at once annihilating life in every part, in the fluids as well as in the solids, the blood in the heart and great vessels, and indeed, elsewhere, remains in a fluid state.

The most effectual means of preventing the progress of acute inflammation into mortification, are those which serve best to control inflammation under other circumstances. If the fever be high and the pulse hard, general depletion is required, and the antiphlogistic regimen should be enforced, warm soothing applications to the part generally answer better than cold lotions, indeed, the latter sometimes seem to accelerate the mortification. Leeches should not be applied upon or in the immediate neighbourhood of the inflamed part.

Even when the mortification has actually commenced, if it affect only a small part of the body, and the febrile symptoms continue, the loss of blood, and the antiphlogistic regimen, may still be necessary. In

adopting these measures, you must exercise much caution, and not forget the severe constitutional depression which is likely to be induced when mortification has once set in. I need not say that when the depressing influence has begun to extend from the mortifying part to the system, and the symptoms of sinking which I just described have commenced, such treatment is quite out of the question. Our efforts must then be directed to support the drooping frame by stimulants, and to allay the local pain and the nervous irritability by sedatives; brandy and laudanum, or ammonia, with cinchona, beef-tea, &c., must be given, if the stomach do not reject them, and warm fomentations be applied to the part, together, perhaps, with chloride of lime, charcoal, or other purifying agents.

The exhibition of tonics and nutritious diet is not often attended with much benefit till the mortification has ceased to spread, and the ulcerative line of separation has commenced; their good effects is then very apparent, more particularly if the separation of the slough, the granulation, and cicatrization, proceed languidly. The activity of these processes may be also sometimes increased by mild stimulating local applications, such as yeast poultices, weak solutions of sulphate of zinc, or a diluted preparation of nitric acid. It is sometimes desirable to expedite the removal of the dead and stinking mass, by dividing the tendons, bones, or other parts, in which the process of ulceration goes on slowly. This should be done carefully, so as to avoid injuring the adjacent lining structures.

Our second class of cases of mortification consists of the instances in which the progress of the disease corresponds with that of the phagedenic ulcers, the destructive results being disproportionate to the inflammatory symptoms, without there being any peculiarity of constitution sufficient to account for the rapidity and extent of the mortification. We can explain such cases only on the supposition of there being something peculiar in the nature of the disease, which makes it differ in its effects upon the tissues from ordinary inflammatory affections. That peculiarity, as in the phagedenic ulcers, is often due to a specific cause. Thus syphilitic ulcers not unfrequently spread by sloughing. The affection called sloughing phagedena is a better instance of this second class of cases of mortification. It consists in a rapidly-spreading slough, observed most frequently about the pudenda or nates of prostitutes who are suffering under gonorrhœa or some form of syphilis. It commences with an ulcer or abrasion of the skin, which is quickly followed by sloughing; the slough extends without much accompanying inflammation. It invades and destroys the surrounding textures, converting them into a dark or ash-coloured toughish mass. This affection is observed in persons who are out of health, and who have been leading the debauched irregular lives of prostitutes; but the constitutional derangement is not sufficient to account for the rapid progress of the local disease which seems to spread by some force of its own. The most effectual treatment consists in killing as it were the local disease, by applying strong nitric acid freely, so that it may soak through the slough, and exert its

influence upon the surrounding tissues. The eschar made by the nitric acid comes away with the slough, and a healthy granulating ulcer is left, in which the reparative processes go on briskly. The disease is thus fairly burnt out in the same manner that a phagedenic ulcer may be sometimes exterminated by the application of a caustic.

ARREST OF DEVELOPMENT OF BOTH BONES OF THE LEG.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Should you consider the following simple narrative of facts referring to a case which occurred in my practice, and which are sent in a true spirit of professional communication, of sufficient interest for insertion in your valuable Journal, they are quite at your service.

I remain, Sir, your obedient servant,

J. N. STEVENS.

11, Princess Square, Plymouth,

May 16, 1849.

Curious and probably unique case of an arrest of development in both bones of the leg, producing the bad effects of a supplemental joint, in which (from a different view of the cause of the unnatural state of the limb, and under the supposition that the bones had been fractured by the rough attempts of the midwife to deliver, in a footling case, and subsequent neglect of proper treatment,) it was determined, on consultation, other means having failed, to perform the operation of excision of the ends of the bones, and thus by treating the case as one of recent compound fracture, give the child the chance of preserving a useful limb, and should this plan fail, amputation was to be performed as a *dernier resort*.

CASE.

Samuel Skewes, aged $2\frac{1}{2}$ years, of healthy appearance, and good muscular development, but the child of delicate-looking parents, became a patient of mine for the first time when a month old, in consequence of an unnatural degree of motion being observable in the right leg, together with a projection of the tibia against the skin on bending the limb, from which it was evident there was a breach of continuity in the bone, and the question naturally arose, how was this state of things to be accounted for? I was immediately struck with the idea of its being a case of an arrest of development in the bone or bones, producing a kind of false joint, but on being informed that the midwife had been very rough in her attempts at delivery, the case being a footling one; and on the parents observing a certain amount of deformity in the limb a few days after the birth of the child, and pointing it out to her, she declared there was nothing of a serious nature to apprehend, and that it would

soon "*right itself again*." I began to incline to the opinion that she had been the cause of the mischief, and that I had a case of disunited fracture to manage, and acting on this idea, I well bandaged the limb, having previously placed the ends of the bones in proper apposition, and applied suitable splints, enjoining as perfect a state of rest as could be observed, for a considerable time. This request having been complied with, on the part of the parents, I removed the splints, &c., in about six weeks, but found the bones in the same unconnected state as before. I then rubbed the ends of the bones together for some time with considerable force, and reapplied the splints, &c., and at length having discovered the failure of this plan also, I determined on having a consultation on the case with two of the most eminent surgeons in the neighbourhood, who being of the same opinion as to the cause of the mischief, advised the performance of White's operation, with the hope of saving the limb; and should this fail, recommended amputation as a *dernier resort*. This being agreed on, I shortly after proceeded (having brought the child under the full influence of chloroform) to expose and saw off the ends of the bones, by making an incision of about three inches long in front of the spine of the tibia, the centre of which should correspond with the disunited end of the bones; and this having been accomplished without any pain, they were carefully exposed, and a small portion of each removed with the loss of only a small quantity of blood. The edges of the wound were brought together by adhesive straps, and a roller having been applied, the limb was placed in a small open fracture box made for the purpose, in which it was secured, and directed to be kept as quiet as possible, the friends constantly keeping watch by the child for the attainment of this object. All went on well for several days, the febrile disturbance of the system not being at all greater than might have been expected, and the suppuration that ensued continued for some time moderate, and of a healthy character; but having gradually increased in quantity, with a high degree of irritative fever and an excessively irritable state of the nervous system, with rapid emaciation and hectic, I deemed it advisable, after a period of three weeks, and in consequence of severe hæmorrhage having taken place from the wound, to resort to amputation as the only chance of safety for the patient; and having procured the necessary professional assistance, I immediately removed the limb below the knee as quickly as possible, and with scarcely any loss of blood, the popliteal artery being the only one which required a ligature. The child was again placed under the influence of chloroform for the amputation, and all went on well from this time, the boy making a good, though protracted recovery; and considering the very critical state of the child, from the failure of the first operation, with its consequent suppurative fever and hæmorrhage, I considered I had some cause for congratulation as to the issue of the case, and more particularly so, as the examination of the limb satisfactorily proved that no other proceeding could have been of any avail to my little patient, the bones having been found too small, had

they united, to support the weight of the body, their diameter at the seat of the mischief not being larger than an ordinary lead-pencil. On examining the bones, I found both tibia and fibula without ossific union, at about a third of their length from the malleoli, but having a strong ligamentous connection, the upper portions of the bones overlapping the lower; and both above and below these abnormal kind of joints, which admitted of very considerable motion, both in flexion and extension of the limb, the bones presented the appearance of having been gradually reduced in size from a short distance from their epiphyses to the ligamentous connection already mentioned, and had they been regularly filed down to the very small dimensions met with at this part of the leg, this process could not have been more effectually performed by art, whilst the portions near the knee and ankle joints were of the usual size and consistence.

Remarks.—My original impression as to the case being one of congenital arrest of development, was considered in consultation rather improbable, as the breach of continuity in the bones was so near the central point of ossification, but I consider the examination of them after the amputation was performed, to have proved satisfactorily the correctness of my first diagnosis, and the rarity of such an unusual anomaly. The irritative fever which followed the primary operation was combated by salines, with tincture of hyosciamus, an occasional mild aperient, and once or twice an anodyne at night; latterly the strength was supported by light nourishment, with a small quantity of wine, &c., &c. The effects of the first inhalation of chloroform were *most complete*, having exempted my little patient from all pain during this severe and tedious operation; it was, however, followed for some hours by considerable irritability of stomach, and slight wandering of intellect.

The excision of the ends of bones, in cases of disunited fracture, was successfully performed by Mr. White, of Manchester, more than a century and a half ago, and has been a practice occasionally adopted by others since his time; and from the supposed analogy in this case of mine, it was considered imperative to give the child the only chance of retaining a useful leg, by resorting to an operation, which, under the peculiar circumstances of his case, appeared to have been dictated by common sense, and the propriety of which surgical experience had confirmed. I believe, however, that this operation is now very seldom performed.

CLINICAL NOTES FROM PRIVATE PRACTICE.*

By WILLIAM H. RANKING, M.D., Cantab., Norwich,
Late Physician to the Suffolk General Hospital.

SUBACUTE BRONCHITIS, WITH TUBULAR EXPECTORATION FROM THE LUNGS.

The following instance of a very rare form of pulmonary disease was attended by me some time since:—

The patient, a gentleman, aged 20, was seized on awaking with a paroxysm of coughing, accompanied by expectoration of sputa, tinged with blood. He had suffered three separate attacks previous to the present, of what was looked upon as simple hæmoptysis, and as such, dreaded as the forerunner of phthisis.

The first seizure of this affection occurred in January, 1841, a second in February, and a third in April, all of which yielded to digitalis. The present attack came on unexpectedly, the patient having the day before been in his usual health. The expectoration consisted of masses, which upon casual examination appeared to be mucus, tinged with blood, and was expelled rather by "hawking" than by cough. Upon more minute inspection these sputa were seen to consist of a whitish membrane, distinctly tubular, and accurately moulded to the form of the bronchial tubes, even to their most minute ramifications. The consistence of these varied; in some portions the membrane was tough and opaque, in others thin, and raised by air into minute vesicles. The blood was small in quantity, and could be easily removed from these tubes by agitation in water.

There was little disturbance in the system beyond that produced by mental agitation, the appearance of the blood having given rise to the greatest anxiety both to the patient and his friends. The pulse was 80, and soft; the skin cool, and tongue natural; and there was little or no pain in the chest. I made a very careful stethoscopic examination relative to the existence of tubercular deposit, but could not discover any grounds of apprehension. The chest was of an unusually round figure, and gave a clear sound on percussion throughout. The respiratory murmur was of an intensity almost puerile, and audible everywhere, with the exception of the neighbourhood of the larger tubes, where it was marked by a sibilous rale. There was considerable præcordial dulness, and extensive but not forcible impulse. There was less difference than natural in the "*timbre*" of the first and second sounds. "The diagnosis I formed from these signs was, subacute inflammation of the bronchial mucous membrane, with plastic secretion; many tubes obstructed partially by membranous deposit; and a dilated heart of less than average power."

Under the impression that digitalis, which had been prescribed on former occasions, was not suitable to the state of the heart, I gave him internally the acetate of lead, guarded in the usual manner by acetic acid draughts. Aperient medicine had been exhibited before my visit. Externally to the chest I applied the Unguent. Acet. Potas. Tart. The acetate of lead was suspended after forty-eight hours, and eight-grain doses of alum were substituted.

Under this treatment considerable amendment was perceptible on the third day, and by the end of the third week every unpleasant symptom had vanished.

The patient now remains in average health, and improves daily under a generous diet, and the daily use of tepid salt-water sponging, followed by friction with horse-hair gloves. Upon every tendency to catarrh

* Continued from page 125.

he applies the *Linimentum Terebinthinae* to the chest.*

REMARKS.

The secretion of a membranous substance by the pulmonary mucous membrane is familiar to every one, as it occurs in croup; in fatal cases of which disease the bronchial tubes are often found to be filled with the same plastic material as is furnished by the lining membrane of the trachea. But the production of membranous secretion in the lungs of the adult, and unconnected with tracheal disease, must be considered as a rare event.

We have, however, several instances on record, by Bartholini, Ruysch, Tulpus, and Morgagni, and others, under the names of bronchial polypus and bronchial worms.

Hippocrates,† also, probably witnessed something of the kind in the case of *Phericides*, whom he describes as spitting up "*γαλακτωδεις*," "white milky substances."

Dr. Bergen, of Frankfort on the Maine, has left us a description of an epidemic catarrh, accompanied by the expectoration of membranous tubes, which occurred in 1759. "*Hanc tristem experientiam in propria filia feci, in qua hoc singulare simul se obtulit phenomenon, quod ante mortem, tussi et screatu rejecerit tubulum membranaceum. Hunc tubulum judico esse portionem membranæ tubulosæ per ramos bronchiorum, durante morbo, generatæ.*"

Another case is related by Dr. Warren,‡ who is generally thought to be the first person who has given an accurate description of the disease. It will be seen, however, that he did not entertain any more concise ideas concerning it than Berger, who preceded him by many years. The case is as follows:—

A girl, aged 8 years, of strumous habits, was suddenly seized with dyspnoea and cough, which yielded to medical treatment. At the end of six weeks she had a second attack, accompanied by night sweats; the symptoms ceased upon the expectoration of what Dr. Warren calls "a large polypous concretion." The girl suffered several relapses, but was at length freed from them entirely by the formation of an abscess, connected with caries of the os calcis.

Baillie has never met with a case of what he calls "*bronchial polypus*," but had seen preparations of it.

Cheyne describes two forms of "*bronchial polypus*," one of which is evidently nothing more than the fibrinous portion of blood effused into the bronchial tubes. The instance given by Laennec, as occurring in the progress of a case of phthisis, was of the same nature.

Dr. Casper§ has published the case of a girl, aged 12 years, also of strumous constitution, who, in the course

of inflammatory catarrh, coughed up "a whitish yellow polypous body, of a tenacious character, and corresponding to the bronchial ramifications."

A case will be found in the "*Med. Repository*," vol. xviii., by Mr. Iliff, and also in a memoir read before the Royal Academy of Medicine, on obliteration of the bronchial tubes, by M. Reynaud.

A paper has also appeared on the subject in the "*Medico-Chirurgical Transactions*," by Dr. Reid, in which two cases are recorded.* Another has been published by Dr. Starr,† of Daventry, under the denomination of "*chronic croup*," and which exactly resembles the case of my patient. A girl, aged 22 years, complained of pain in the chest, with a sense of general oppression. Membranous tubes, accurately moulded to the bronchial tubes, and, as in my case, tinged with blood, were expectorated. The blood was doubtless effused from small vessels ruptured in the exertion necessary to dislodge the tenacious sputa.

Authors are far from agreeing as to the precise pathological condition of the bronchial mucous membrane which gives rise to the plastic secretion. There are two principal and opposite opinions: one, which attributes the production of membrane, instead of the ordinary more fluid secretions of inflamed mucous tissue, to the existence of a high degree of irritation; another, which ascribes the phenomenon to an excess of the albuminous constituent of the blood. The generality of writers are in favour of the first opinion; the latter is embraced, among others, by Copland.‡ The question is discussed at some length by Andral,§ by whom it is decided that a high degree of irritation is not sufficient *per se* to cause the secretion of plastic membrane, but that there must be, in addition, some special conditions of innervation or sanguification.

It appears to me that neither of these opinions is the correct one, and that the true explanation is still to be sought for. If the more frequent formation of plastic membrane in children than in adults be due to the existence of a larger quantity of albumen in the blood of the former, then ought we to see such productions the common consequence, in them, of inflammations of the mucous tissues. Such, however, is not the fact. One half, at the least, of the diseases of infancy and childhood, consist of irritations, of greater or less intensity, of the pulmonary and gastro-intestinal mucous membranes. Yet in cases only of croup and diphtherite do we see the production of plastic membranes—cases which, numerically considered, are rare.

The same objections hold good against the opinion which refers this peculiar secretion to the intensity of the vascular excitement. If the degree of irritation were the true cause of such secretion, we ought to see it more frequently among the numerous cases of bronchitis and gastro-enteritis which present themselves to our notice. In our patient, as well as in that of Dr. Starr, every symptom opposed the idea of high vascular

* Since the above notes were taken this gentleman has died, with general anasarca, and other symptoms depending upon a dilated heart. He had no return of the tubular secretion, but suffered from emphysema of the lungs, and eventually from oedema, coexistent with the general dropsical symptoms.

† *De morbis popular. lib. vii. ss. xli.*

‡ *Med. Trans.*, vol. i., Art. 16.

§ *Wochenschrift für die Gesamte Heilkunde.*

* Vol. xviii.

† *Medical Gazette*, Feb. 7, 1840.

‡ *Vide art. Croup, Copland's Dictionary.*

§ *Anatomic Pathologique*, p. 481.

excitement; yet was the formation of the membrane of the most perfect kind.

It is, however, in this as well as in many other points connected with the science of medicine, more easy to frame objections to a given opinion, than to propound

a better; nor in the present instance do I pretend to do so. All that can be said is, that the case may be regarded as subacute bronchitis; but why fibrinous, rather than mucous secretion, should take place, remains a mystery.

A Biographical Notice

OF

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Secretary to the Provincial Medical and Surgical Association, and Editor of this Journal.

One principal object originally contemplated in the formation of the Provincial Medical and Surgical Association, was to elevate the character of the members of the profession resident in the provinces, and by a more systematic combination, for the advancement of medical knowledge, to render their labours more productive to the treasury of science. To effect this, and in a manner in some degree commensurate with the importance of the occasion, it was found necessary that a regular plan should be devised, by which the daily occurring medical facts should be collected together, and that provincial practitioners should have a ready mode by which they could give their thoughts and opinions to the world. This important enterprize could not be successfully carried forwards without encountering great difficulties, because its very novelty rendered it impossible that those who engaged in it could have any precedents for their guidance. The scheme originally devised at Worcester, in 1832, did not provide for more than the publication of an annual volume of "Transactions," which it was very soon found was a very inadequate representation of the active and energetic spirit of inquiry which has of late years characterized the enlightened cultivators of medicine exercising their art in the English provinces. In a few years after the institution of the Association it became apparent, that a medium of communication published at more frequent intervals was positively necessary ere the object the society contemplated could be accomplished. It was not, however, until the year 1840, that any effort was made to bring about this good purpose; and but for the ready aid of one whose irreparable loss the Association will long have to mourn over, we should in all human probability have remained for an indefinite period vainly endeavouring to produce so desirable a result. But, fortunately, we possessed in our highly esteemed Secretary Dr. Streeten, one whose habits and pursuits peculiarly qualified him to foster the energies of the profession in the provinces; and whose zeal, learning, and sterling worth prompted him to do all in his power to call forth these results,

In accordance, then, with the desire to do honour to one who has been a successful cultivator of science, and who, by his life and conversation, has done much to produce a favourable impression of the medical

character on the public mind, we proceed to throw together some reflections on the life of the late Editor of this Journal.

Robert James Nicholl Streeten was born on the 28th day of June, 1800, and was the eldest of eight children. His father, John Mitchell Streeten, being at the time of his birth a resident in London. His childhood calls for no comment, excepting that his early education was carried on at home under the direction of his father; and we may infer that he was in youth well grounded in languages, ancient and modern, as in after life, he shewed very great knowledge in this department, particularly in Greek, Latin, Hebrew, French and German. We know nothing as to the circumstances which determined the choice of his profession, but find that he matriculated at Edinburgh University in the year 1820, where he remained till the year 1822. He then went to Paris, and remained there until the year 1823, after which he returned to Edinburgh and graduated in 1824. His diploma is dated on the 2nd of August in that year, his thesis being "*De delirio tremente.*" In that celebrated University he formed acquaintance congenial to his habits and pursuits, and was so fortunate as to be noticed by the late Professor Graham, to whom, in conjunction with the late Dr. Hope, he became clinical clerk; and the intercourse with the latter, thus occasioned, ripened into friendship, which continued uninterrupted until the death of that distinguished pathologist.

Professor Graham seems to have become very much attached to his pupil, as we have now lying before us a recommendatory letter from the former, on the occasion of the latter becoming a candidate for the office of Physician to the Worcester Infirmary, in which he addresses Dr. Streeten in terms of the warmest friendship, and expresses much anxiety for his future prosperity. It is worthy also of notice, that it was to his intimacy with the Professor, whom he accompanied on a walking tour to the Highlands, that the subject of this memoir first derived his taste for botany, and for the general pursuit of natural science.

Not many months after he became a physician, his father being then resident in the neighbourhood of Worcester, Dr. Streeten commenced practice in that ancient city. He was soon favourably known and

respected by his medical brethren there resident, and was elected one of the Physicians to the Dispensary. Here he had an opportunity of displaying his skill in the treatment of disease, and it proved of a high order. His connection with the Dispensary continued till his decease, and his friends have the consolation of reflecting, that his mild and amiable deportment to the sick poor so endeared him to his patients that they will long deplore the loss they have suffered.

Dr. Streeten's first contribution to medical literature was communicated to the *Midland Medical and Surgical Reporter*, a periodical which may be said to have been the forerunner of the Provincial Medical Association, and of which the first number was published at Worcester in the year 1828. Dr. Hastings, in his Address at the Worcester meeting, when the Provincial Medical and Surgical Association was formed, says of the *Midland Medical and Surgical Reporter*—"Four years experience in conducting that work has convinced those who were engaged in it, that provincial labourers are neither few, nor of small value, and the knowledge of this fact was the circumstance which induced us to consider that the more extended enterprize on which we are this day entering, was not only feasible, but would almost certainly be crowned with success." In the early deliberations concerning the constitution of the Provincial Association, Dr. Streeten took part. He was present at the first meeting, and was placed on the Worcester Council, of which he continued an active member until he died. Indeed it was soon apparent that he possessed just the talent and industry that were required in any one who would aspire to manage the affairs of an Institution, which in a few years spread its branches into every part of England, and whose members were anxious for the advancement of medical literature. A paper, published by him in the first volume of the "Transactions," illustrates the peculiar bent of his investigations, it is entitled "A Report of the State of Disease in the City of Worcester, during the Year 1832, with a Summary of the Atmospheric Phenomena during the same period." This paper constitutes a very valuable statistical document, and contains much precise information relative to the diseases prevalent in Worcester in that eventful year when the spasmodic disorder cholera appeared in that city. For the task he undertook the writer was well qualified, for he had nobly and gratuitously devoted himself to the service of the public by becoming Secretary to the Board of Health, constituted at that time in Worcester, and the indefatigable and able manner in which he performed those arduous duties was the theme of general admiration.

The next occasion which called forth Dr. Streeten's energies was, after the epidemic influenza prevailed in 1837. At that time the Council of the Provincial Association issued a circular to the members, containing inquiries respecting its rise and progress in various localities where the members resided. In reply to these inquiries a great many communications were sent, but it was manifest that without some competent person would take the trouble to arrange those replies, and deduce from them the conclusions they legitimately

supported, comparatively little advantage would result from the returns thus collected. The subject of this memoir undertook this task with alacrity, and produced a report which at the time was considered of great value; and no one can now refer to that document, as published in the sixth volume of the "Provincial Transactions" without being struck with the lucid manner in which a great mass of information respecting the spread of the epidemic influenza of the year 1837 is there laid before the public; and they must at the same time admit, that the mode of inquiry thus instituted by the Association, was productive of much benefit, and is worthy of imitation on future occasions.

These productions of Dr. Streeten could not fail to have a favourable influence in recommending him to the general members of the Association, as one highly qualified to carry out the objects for which the Association was formed, whilst at the same time the active manner in which he exerted himself in assisting the deliberations of the Worcester Council of the Association, by whom the publications of the Society were superintended, pointed him out to them as one in whose ability and energy they could place most unhesitating reliance. It was not long before an opportunity occurred which enabled them to put those favourable impressions to the test, for in the year 1840 Dr. Hennis Green determined on publishing a weekly periodical journal, which he was desirous to connect with the Provincial Association, and he declared his intention to advocate all those objects for which the Association was formed, and to demonstrate the possibility of aiding the efforts of the scattered members of the profession, in the manner successfully carried out by the proceedings of the Provincial Association. It was a part of his plan to show how highly he valued the Association, by requesting that one of the members of the Worcester Council would be connected with him as editor of the new publication. The Council had no hesitation from their knowledge of the ability and acquirements of Dr. Streeten, in fixing upon him as the coadjutor of Dr. Green, and on their recommendation the undertaking was commenced under the auspices of those two physicians, with the understanding that all endeavours should be used to insure continuance to the new work by the members of the Society.

We shall not dwell on the history of the *Provincial Journal*, for Dr. Streeten had little to do with its early management, he only wrote the leading articles. It was not until the year 1844 that he became the responsible Editor, having then become Secretary of the Association. To this office Dr. Streeten had been appointed at the anniversary meeting at Leeds, in the year 1843, on the retirement of Dr. Hastings and Mr. Sheppard, the former Secretaries; and when the determination of the proprietors of the *Provincial Journal* no longer to continue to publish the work was known, all eyes were turned to the Secretary, as being possessed of the necessary qualifications to conduct a weekly journal for the members of the Association, and he accepted the honourable and responsible post to which he was thus unanimously called, stating in the first leading article he wrote "The work will from this time

be exclusively the Journal of the Association, and no other interest, whether of publisher or proprietor, will be suffered to interfere. The principles on which it is intended to conduct it are precisely those on which the Association is itself founded, and embrace all those objects which are set forth in the printed prospectus sent to each member on his admission, and annually circulated with the volume of 'Transactions.' Up to this time Dr. Streeten had not confined his contributions to the *Provincial Journal*, but had occasionally written articles for Dr. Forbes in the *British and Foreign Medical Review*. Henceforward his energies were solely directed to carry out the behests of the Association in the two-fold character of their Secretary and Editor of their Journal. For this task he was admirably fitted, but still it was a greater undertaking than should fall to the care of any one individual. The correspondence alone which devolves on the Secretary of a society numbering between fifteen hundred and two thousand members, is a serious and constant tax upon a man's time. Then there are the subscriptions to be collected and looked after, the accounts to be kept, and occasionally great difficulties to be contended with in collecting arrears, and sometimes little irregularities to be corrected, which, in spite of the most careful management, will inevitably arise. The Secretary has also to endure communications not always of the most courteous kind from those who either fancy that they have, or really have, some cause for dissatisfaction; and occasionally, we regret to say it, he has to bear the disappointment arising from members who have gone into arrears refusing to pay their just debt, and in an abrupt manner leaving the ranks of the Society. Besides all this there are little infirmities of temper to be humoured in some of the members, who, in all other respects, are calculated to illustrate the profession they so ardently cultivate. It is manifest, therefore, that the Secretary is often placed in a trying position, and such as not only requires cool judgment and discretion, but also much tact and temper. The subject of this memoir was, in health, fully equal to this trying situation, but it may be doubted whether the additional labour of the Editorial department was not too much for him, seeing that in the latter capacity he had also to call forth such qualities, as judgment, calmness, discretion, and courtesy.

That these qualities were called forth, and that the late Editor was enabled by these means to produce a periodical worthy of the Association, is, in the highest degree, creditable to his intellectual and moral endowments, but that his nervous system would be shaken by such overstraining of the powers was not improbable, for Dr. Streeten was of a sensitive temperament, and keenly alive to any approach to censure. We have seen him write under observations, not always made in the best or most considerate spirit, by members at the anniversary meetings, if he considered them derogatory to the high character which his heart's desire was that the Journal should assume. The result of one of these conversations regarding the publications of the Association was the appointment of a Committee, at the anniversary meeting, at Norwich, to inquire

whether any, and what, alterations were required or desirable in the general publications of the Society.

The report of this Committee must have been highly gratifying to Dr. Streeten, as it fully recognized the importance and value of his editorial labours, and at the same time, by recommending the Journal to be published only once a fortnight, they so far diminished the weight of the responsibility which he had to encounter. They also proposed that Dr. Streeten should be assisted by some one of the members undertaking the foreign department of the Journal, which consequently has since that time been superintended by Dr. Ranking. This Committee also reminded the Association that they had a duty to perform in sending communications for the publications, and concluded in these words:—"Your Committee earnestly hope that whatever may be decided in the matter referred to their consideration, the Association will do its utmost, as a body, to promote the cultivation of the higher departments of medical inquiry, and thereby show that it has no sympathy with those who make the '*cui bono*,' (in the sense of immediate and obvious application to the healing art,) the one test of the value of any discovery. It is only thus we can hope to attain the high position to which such an important body should aspire, and do something towards rescuing our profession from the degradation into which it has been brought by an opposite course."

We believe that this report had a very salutary effect, not only in inducing many to come forward as contributors to the publication, but it also gave a firm assurance to the Editor that he would be supported in his laudable exertions by some of the best and most gifted of provincial investigators of medical science, and it convinced him that he had only to persevere in his onward course in the same steadiness and ability he had hitherto manifested, in order to see accomplished his earnest desire,—that the Journal should be worthy of the Association; and to those friends to whom his memory is dear, the reflection is consolatory that he lived to see, in the improved tone of the communications of the contributors, a realization of those glowing anticipations. From this time forward the character of the Journal, as a vehicle for conveying important medical information to the members of the Association, became more and more established, and no one who was in the habit of communicating with Dr. Streeten on the subject could fail to observe that his heart beat high with expectation of the benefits that would ultimately accrue from these combined efforts of the provincial profession, and no one could doubt that in his arduous undertaking he was supported by the conviction that his life, which was devoted to the cause of the Association, was not being spent in vain.

A year ago there was no reason to believe that he might not fairly calculate on living to see all the fore-shadowings of the future success of the labours in which he was engaged realized, for he was then a hale man, and appeared at that period to bear his work well. At the late Anniversary meeting at Bath, he was in high spirits, and nothing there occurred to damp

their ardour. When he returned to Worcester a more than usual press of business awaited him, but he got through it all without difficulty, and took a short trip afterwards.

It was not until late in the autumn that any alteration in his usual good looks and buoyancy took place. Those who were in the habit of seeing him often can now recollect that a change came slowly over him. He became more pallid and rather lost flesh. But nowhere was the alteration that was silently going on more apparent than at the Council Meetings, where, usually, he was self-possessed, and remarkably free from anything like irritability of manner; but as the winter approached, there was some difference in this respect, and his friends now feel that it was the beginning of that disease, which finally sapped the foundation of his nervous power, whose first manifestations they witnessed.

Excepting these trifling occurrences, to which the subsequent fatal event have given a seeming importance, the friends of Dr. Streeten did not observe any indication of illness until November, when he had an attack of bronchitis, from which he partially rallied. It returned, however, soon after Christmas and seemed to weaken him, and he emaciated under it; besides which, his nights were often disturbed by attacks of difficulty of breathing. There, however, really appeared nothing sufficient to awaken alarm; for the most careful physical examination of the thorax demonstrated nothing of a threatening kind. In short, the usual rules that occur in bronchial affections were alone discernible. It is worthy of remark that, throughout all the early period of his illness the action of the kidneys was profuse and the secretion pale, but chemical examination disclosed nothing more than the ordinary indications in hysterical cases. The pulse was quickened and the sounds of the heart, though natural, were heard louder than usual and over a larger part of the thorax, leading from the first to the belief, which the subject of this sketch had always entertained, that the heart was of a large size. He, however, did not give up his avocations, for he said although he was less equal than usual to his work, he felt that with a little assistance he could get on very well. So matters proceeded, and he took the usual measures which the symptoms appeared to call for. As the spring approached, no favourable change occurred, and he was strongly advised to leave Worcester for a time and give up his exertions. This he consented to do, and selected Torquay as the place of his retreat from the cares and anxieties of his position. This was early in April, and the weather proved cold and ungenial. However, his pectoral symptoms partially left him when he had been a short time at Torquay, and he became, as he thought, dyspeptic. He did not, under these circumstances remain longer at the coast, but returned to Worcester.

It was a great disappointment to his friends to find that his general appearance had become even more unfavourable during his short absence in Devonshire, and he found it absolutely necessary when he returned home to seek medical aid for a severe gastro-enteric irritation. The gastric disturbance shewed itself by

frequent nausea, anorexia, and by the little food he did take being generally rejected. Soon after his return dysenteric symptoms also set in, which harassed him exceedingly, and his strength rapidly gave way.

It was in vain, for some time, that the ordinary means were employed to combat this untoward concatenation; but two days before his death a favourable change appeared to take place; the irritability of the stomach diminished, he retained a little food, and the alimentary functions were altogether better performed. After his return home, till the very day of his death, he continued to exert himself in managing the affairs of the Association, although the superintendence of the Journal was in the hands of Mr. Walsh. On the ninth of May there was a Council meeting at his house, and he took part in the deliberations. On the tenth his friends thought him better altogether, and he himself expressed a confident hope of recovery.

These encouraging anticipations were as evanescent as a passing moonbeam; within a very short time after having expressed a hope that the disease had taken a favourable turn, he was seized with a shivering and faintness, followed by spasmodic pain in one thigh, and he expired almost in a minute.

A careful examination of the body was made, and the following morbid appearances were displayed:—

Worcester, May 11th, 1849.

Examination of the body of Dr. Streeten twenty-one hours after death.—There was no appearance of decomposition; the general surface of the body very pallid. On making the incision in the parietes of the thorax and abdomen a thick layer of fat was observed; about half a pint of serous fluid in the cavity of the abdomen; the lungs collapsed on opening the thorax; about half a pint of serous fluid in each sac of the pleura; the lungs quite healthy; about an ounce of fluid in the pericardium; no adhesion between it and the heart, but there was fibrinous deposit in the left ventricle, and especially in the course of the coronary arteries; the heart was healthy in structure, and the valves were particularly so; the heart was at least one-fourth larger than the average; there was hypertrophy of the left ventricle; the right ventricle was enlarged, and rather flabby; the opening between the right auricle and ventricle was large; the blood on the right side of the heart was fluid, and these cavities were rather empty. The liver seemed larger than natural, and its vessels were congested, but there was no structural change. The gall-bladder was much distended with bile. The spleen healthy, but large. The left kidney was of very small size, and surrounded by much fat; there was also thickening and hardness of the membrane lining the pelvis and the uriniferous tubes; there was no granular degeneration; the right kidney was of natural size, and the pelvis and uriniferous tubes were not so much thickened. There was a good deal of fat covering the intestines, and in the mesentery. The stomach, when opened, was found much distended with flatus; the mucous membrane of the cardiac end of the stomach was much congested with blood, which was extravasated in patches, and the whole surface was of a reddish-brown colour; the rugæ were particularly dark; there was no ulceration, and the pylorus was healthy. The same state of mucous membrane, though

not to the same extent, was continued in the duodenum, and also throughout the greater part of the small and larger intestines.

CHARLES HASTINGS.
WALTER JONES.
J. H. WALSH.
HENRY DAVIS.

It appears then that the disease under which all the powers of the system succumbed, was essentially one of the mucous membranes. It seemed to commence as influenza, and at first only to involve the bronchial surface, but after remaining in that organ for some time, and much disturbing the important functions performed by the lungs, the inflammatory action changed its seat, and that part of the mucous texture subservient to alimentation became extensively affected. The nutrition was still thus much interfered with, and the supply of new blood must have been very trifling. The heart, although not diseased, was larger than ordinary, and the right side was rather flabby. It can be readily understood, with such a state of things, how a sudden fainting fit might produce death, and we believe that such was the catastrophe which deprived our Society of one of its most honoured and useful associates.

We may here close this imperfect notice of one, whose bright career of honourable exertion was thus suddenly terminated, long ere the period of the sear and yellow leaf had arrived, and apparently before the sheaves of the harvest had been gathered in; but we must not forget shortly to advert to the fact, that as a citizen, Dr. Streeten was animated by an ardent desire to serve his generation, and that the community amongst whom he lived, will long have to regret the loss of one, who on all occasions was ready to step forward for the advancement of sound knowledge, and for the intellectual and moral improvement of the people with whom he dwelt. This induced him to lend his aid to the literary and scientific institutions in the city of Worcester, but to none more conspicuously than to the Worcestershire Natural History Society. Those who are acquainted with the early history of our Association will doubtless bear in mind, that in the first volume of its "Transactions," Dr. John Conolly published "A Proposal to establish County Natural History Societies for ascertaining the circumstances in all localities, which are productive of disease or conducive to health." In the course of his remarks on the advantages of these societies, Dr. Conolly observes, "out of the County Natural History Societies there could hardly fail to arise one more advantage which did not enter into my first consideration of them. The gradual concentration in *County Museums*, of a great part of the valuable collections already made by scientific individuals, or which would naturally be made in the course of the particular labours of several of the sections, the difficulty which individuals find in becoming even tolerably acquainted with the geology, botany, and natural history of their own county would thus in a great measure be removed; its products and manufactures would become familiar to every eye, and its history and antiquities to every mind. A tour

through the provinces of England and Scotland might then become a tour of science as well as of pleasure, and the peculiarities of our island displayed in numerous scientific collections, would attract distant and even foreign visitors." After mature deliberation it was determined to endeavour to carry out this admirable scheme in the county of Worcester, and the circumstance that Dr. Streeten was known to have given much attention to such inquiries, pointed him out as particularly qualified to assist in forming such an institution in Worcester. He cordially entered into the undertaking: he became one of the curators to the infant museum, and never failed as long as health was vouchsafed him, to give part of his time to forward these pursuits, and always regarded them as being so intimately connected with the science of medicine, that no well-educated practitioner should neglect their study.

Dr. Streeten had his reward in seeing the plan for establishing a museum, in connection with the Worcestershire Natural History Society, answer far beyond the anticipations of those who engaged in it, and it was with him a matter of great satisfaction that considerable additions to, and improvements of, the museum had been going on for some months previous to his death, which he had an honest pride in believing would be completed before the anniversary meeting, at Worcester, and would be viewed by the members there assembled with unmixed gratification.

Thus then it will be apparent, to all who reflect on what has been said of the subject of this memoir, that he was actuated by no sordid or selfish motives; "*nil humani a me alienum puto*" he might have taken as his motto, and one might well enlarge on this part of his character, but we must rather touch upon these points than enter into details; neither can we do justice to Dr. Streeten's private worth, which shone brightly in its home duties, and rendered him dear to those who were closely united to him. Those also who were intimately connected with him by the ties of friendship can testify the warmth and sincerity of his attachment, and his undeviating desire to be kind and useful to them. In his intercourse with his patients he was actuated by a constant desire to relieve their sufferings and anxieties; and he exercised his skill as a physician with so much ability, kindness, and urbanity, that he secured the confidence and attachment of those who confided themselves to his care. He made the golden rule, to "do as he would be done by," the guide of all his actions, and we doubt not that throughout his brief pilgrimage he was actuated by higher motives and aspirations than those which spring from the conventional rules that the mere worldling is too apt to regard as the controllers of his destiny, for he had thought deeply on the great truths of revealed religion, and they had shone forth in his life.

One who anxiously watched him in his illness, and tenderly administered to his relief, thus writes concerning these things:—

His first fee was a bible, given him by an old gentleman in Edinburgh, soon after he had taken his degree; it was a book which he had before that learned to value,

though it was not till some time after that he fully appreciated its worth, still it must have been grateful to him, and perhaps an important step in his after career, to have been thus reminded, as it were, that in entering upon a profession which is commonly, though very unjustly, said to have a natural tendency to infidelity, he should constantly endeavour to live unto Him whose hand he could not fail to recognize in the construction

of a frame so fearfully and wonderfully made as that of man, which was henceforth to be his study. We need scarcely say, that the hint thus given to him was not lost sight of in his after life, the last action of which was, to carry that sacred book up with him on retiring, as he then thought, to rest for the night, though in reality to enter upon an eternal rest—the rest that remaineth for the people of God.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, JUNE 13, 1849.

It is far from being our wish to undervalue the benefits that might be obtained through the instrumentality of judicious sanitary regulations, or to say a word that could tend to check the progress of rational philanthropy; but we think that while it is our duty to avoid apathy and depreciation on the one side, it is equally our duty to avoid enthusiasm and unreasonable anticipations on the other. There is a proneness to exaggeration in the English character—a liability to be carried beyond the boundary of common sense with reference to some favourite scheme—an inclination to regard as essential what may only be auxiliary, and to attribute omnipotence to causes which may, in reality, be capable of exerting only a partial amount of efficacy.

We trust that we are perfectly cognizant of the advantages that would arise from a system of universal drainage, ventilation, and cleanliness, and we admire the zeal which has been displayed by some members of our profession on behalf of sanitary legislation; but we fear that *too* favourable an impression has been given to the public mind concerning the beneficial results that may be expected to accrue.

Differences of opinion necessarily exist upon this as upon every other question, whether medical or non-medical, that can engage the thoughts. Some of our brethren are disposed to view the subject with less sanguine hopes than others; they give a more prominent place to what they believe to be more prolific sources of injury than want of *atmospheric* salubrity; they have carefully deliberated upon the well established, but too frequently neglected fact, that “man cannot live upon air.” They think that *due* weight has not been attached to the baneful influences of *poverty* and *vice*.

When called to estimate the causes of mor-

talidity, it is evidently most important that these destructive agents should be accurately appreciated, and we now briefly refer to this topic for the purpose of drawing special attention to its consideration.

Our own observations of disease have led us to the conclusion that draining, ventilation, and cleanliness, are utterly inadequate to achieve that grand amelioration in the physical condition of our population which is, by *many* parties, so confidently anticipated. Our conviction is, that starvation, intemperance, and exposure to cold, are far more powerful instruments in the production of disease and death, than are burial grounds, piggeries, and cess-pools; nor do we think that any permanent diminution of sickness and fatality will be ensured, among the poorer classes, so long as they seek in vain for the requisite supply of their daily sustenance, and wander well-nigh garmentless upon the winter's ice, and become emaciated under the direful tyranny of debauchery and drunkenness.

There is another item in the catalogue of morbid causes that must not be overlooked, namely, the impurity of the *internal* atmosphere. Acts of Parliament may, to a considerable extent, lead to the modification of the *external* air,—by the removal of nuisances, the pulling down of hovels, and more wholesome distribution of the dead—but they will not prevent the huddling together of the needy in dirty and contracted rooms; and are we not justified in believing that much more serious disease continually arises from this herding of the destitute, particularly when any infectious malady is introduced, than from the effluvia of church yards or ill-regulated drains?

We recommend to the perusal of our members the Reports of the Committee of the College of Physicians, in Edinburgh, appointed to consider Bills for the improvement of the health of towns; it is a pamphlet deserving attention. The following extract is copied from it:—

“All that these sanitary measures can effect, will not purify the air of the interior of the crowded rooms, inhabited by the dissipated and improvident poor, or

by the destitute poor, or do more than diminish the variety of disease and suffering which may be ascribed in part to the impurity of that air. And although much may be done by religious and moral instruction, by an enlightened and general system of improved secular education, especially as addressed to those who stand most in need of sanitary improvement, and by the well-regulated relief of destitution, to correct the evils which spring from dissipation or from indigence, yet it is only necessary to advert to the great mass of suffering permanently included under the name of the Irish poor, in every large town in this country—to the effects of stagnation in trade in any of the manufacturing districts—or, to the faulty construction of large portions of such a town as this, (Edinburgh,) which are private property and cannot be rapidly altered, in order to perceive that any such measures, for a long time to come, can only be partially successful."

Review.

On Cancerous and Cancroid Growths. By JOHN HUGHES BENNETT, M.D., F.R.S.E., &c. Edinburgh: Sutherland and Knox. 8vo. pp. 260. With One Hundred and Ninety Illustrations, copied from Nature, and Drawn on Wood by the Author.*

IV. GENERAL PATHOLOGY.—Under this head the author treats of the origin, growth, and degeneration of cancers.

Origin.—The filaments, cells, and fluid, which together make up the tissue called cancerous, originate in coagulated exudation. This is poured out exactly in the same manner as all other forms of exudation. When first perceptible it consists of a firmly molecular and granular matter, in which the cancer cell arises as in a blastema. While part of the exudation passes into cells, another portion passes into fibres, exactly in the same manner as takes place during the healing of an ulcer or wound. The filaments and fibres so formed are interlaced among the granules and cells of the blastema, to constitute the stroma of the growth, the form and density of which is dependent on the number and arrangement. Why a cancerous should differ from an inflammatory or a tubercular exudation, we are ignorant; but every kind of reasoning must lead us to the conclusion that it depends on the inherent composition or constitution of the exudation itself. On comparing the phenomena which accompany these three forms of exudation, the author points out, that, taking the products of simple inflammation (say pus) as a standard, the cell development of tubercle is below, and that of cancer above it, in the scale. One is deficient in power of development, the other possesses this power in excess. Taking all the circumstances into consideration, it seems to him probable, that tubercle is connected with some derangement in the function of the primary, and cancer with some derangement in the function of the secondary, digestion. He further points out, that whilst either of them may be found accompanied or alternate with a simple exudation, they are never met with together.

Growth.—Cancer cells and nuclei, with fibrous tissue, being produced in the manner described, the former propagate themselves. The old cell walls dissolve or break down, and the included cells or nuclei are liberated, and give rise to others in turn. The blastema necessary for this purpose is at first obtained from the original exudation poured out; but after a time, as the fibrous tissue increases, new vessels are formed in it, which continue to furnish materials to the new growth in the same manner as the old vessels furnish materials of growth to the old tissues. Notwithstanding the property inherent in the exudation itself, formerly alluded to, pathologists are obliged to acknowledge that a tissue once formed and furnished with blood-vessels, possesses the property of exerting a species of selective vital attraction on the blood, whereby such matters are transuded through the capillaries, as are readily transformed into a substance like itself. Hence, why a cancerous tumour increases by growth, which tubercle cannot be said to do.

A cancerous growth once formed may increase slowly or rapidly. The more cells it contains, the more rapidly it increases. When ulceration takes place, the cell-element, restrained until that moment by the pressure to which it was previously subjected, rapidly throws out crowds of cells, forming fungoid masses on the free surface. Internally, the cells may push their way into, and infiltrate themselves among the neighbouring tissues, which then also become cancerous, and thus the disease extends from one texture to another. In protracted cases, chains of lymphatic glands are affected, and often form separately or collectively large tumours, which, in their turn, serve to convey the disease to other textures. In the opinion of the author, the cachectic appearance, which accompanies the progress of the disease, is not connected with the cause, but is rather a result of the perverted nutrition it occasions. That cancer can be communicated by contact or inoculation is certainly opposed to experience, and the experiment of Langenbeck is not sufficient to establish this.

Degeneration.—Cancer declines, degenerates, and dies like all other vital formations, but, like them, it leaves germs which perpetuate its growth, so long as they receive nourishment. Sometimes this process receives a check from the cells, which are the agents of growth, being rendered abortive, and the result may be—1st, a fibrous cicatrix; 2nd, a fatty mass; or 3rd, a calcareous concretion.

However seldom the healing of cancer by cicatrization may be known to have happened, that it occasionally does so cannot be doubted, and Dr. Bennett gives several facts which render it probable that this is of more frequent occurrence than is generally supposed. One of the most common modes in which cancer becomes fatty, is by the transformation of its cells into compound granular corpuscles, constituting the reticulum described by Müller. It may also shrivel up, and be converted into a calcareous mass exactly in the same manner as an inflammatory or a tubercular exudation. Facts recorded in the first part of the work, afford, in the opinion of the author, unequivocal proof that a cancerous growth may undergo a spontaneous cure, and he feels persuaded, that when evidences of this result are more diligently sought after than they have hitherto been, it will be found to

* Continued from page 300.

have occurred much more frequently than is generally supposed.

V. STATISTICS.—The author is of opinion that, as exact observations accumulate, the most important results will be obtained by applying the principle of statistics to cancer. In the present state of science, however, he denies that we possess a sufficient number of these to serve as a basis for such an inquiry. According to him, there are only 526 cases of morbid growths on record, in which the structure has been carefully examined, and these include all kinds of tumours, cancerous and canceroid, in all kinds of localities and tissues. Our data, therefore, are not sufficient to render an analysis of them desirable.

VI. DIAGNOSIS.—The symptoms of cancer have been frequently found insufficient for the purposes of diagnosis; but physical signs, once established and ascertained, are, in *conjunction with these*, of universal value. The only physical method of examination to be depended on is by means of the microscope. The author takes great pains to point out, not only in this chapter, but in the preface and several other places, "that this instrument is not in itself capable, even in the most expert hands, of doing anything; but, conjoined with a knowledge of the symptoms, progress of the case, form and appearance of the morbid growth, it offers us an additional and most valuable means of prosecuting our inquiries. It is from an union of all these circumstances, combined with a minute examination of the growth, under such magnifying powers as will clearly display its cells and other primary elements that we ought to found a diagnosis, and not from one or the other separately." He further observes that "it should not be forgotten, that the whole subject is yet in its infancy, although we can see clear indications of the great value it is destined one day to acquire. Hence all generalizations should be received with the utmost caution, and all statements, in a field so comparatively unknown, ought to be advanced with the utmost diffidence."

Dr. Bennett then refers to numerous figures in the first part of the work, which he considers are highly characteristic of the structure of cancer, as seen under the microscope, and he refers to doubtful cases where such structure having been made visible, has decided the diagnosis; he also contrasts the appearances observed under the microscope between cancerous and canceroid structures. But here again the want of the illustrations, to which he continually refers, prevents us from following him.

VII. PROGNOSIS.—In this chapter the author discusses two points of great practical importance,—viz., first, the supposed uniform fatality; and, second, the tendency to return of morbid growths.

The author has brought forward several facts to show that cancerous growths do not necessarily go on enlarging until they kill, but that sometimes they become abortive. From the circumstance that indolent tumours may exist in a breast or elsewhere for years, without making progress, or causing inconvenience, and after a certain time increase and exhibit great powers of development, it would appear that at first they are often purely local. In this indolent state a tumour may often be dispersed by appropriate means, and, if excised, be permanently eradicated. Truly cancerous tumours also have been

said to have been thus treated with success, but as the structure of these growths has not been examined microscopically, there is no proof of the correctness of the statement. With regard to the probability of return, it is now well ascertained, that not only cancerous, but the most innocent, growths, may return after excision. Numerous instances are on record of fatty, fibrous, and encysted growths, returning again and again, and being finally extirpated with success. Hitherto all these kinds of tumours have been too frequently confounded together by surgeons, and it is absolutely essential to obtain more accurate information, as to the relative frequency of return in them, before arriving at decided conclusions.

VIII. RATIONAL TREATMENT.—When we observe that nutrition throughout the animal world obeys certain laws, we must feel persuaded of the reasonableness of endeavouring to destroy growth, by removing or counteracting the circumstances which favour, and putting in force those, which are hostile to it. Those means which have been blindly adopted by empirical practitioners, if they fail, do so, because they act in opposition, and if they succeed, it is because they are in harmony with the rule. The only method of treatment which has been proved to possess the slightest effect, may be shown to be that which a knowledge of anatomy and pathology would have dictated. Thus a cancerous growth is a vascular structure, which consists of nucleated cells, infiltrated among a fibrous stroma, and its power of growth, extension, and re-development, depends upon the number of cells it contains. It follows, that to retard the progress of the cancer-cell, when once formed, is to retard the advance of cancer itself, and that to render it non-productive is to arrest its progress. If it be true, that a cancerous growth may, to a certain extent, be local, it follows, that the earlier it is excised the better the chance of eradication. Lastly, if the origin of a cancerous growth depend upon the peculiarities inherent in the exudation poured out, our hopes of prevention, and especially of preventing a return after excision, must depend upon our discovery of what those peculiarities are,—upon our power of obviating them, and restoring the healthy condition of the economy. The author, therefore, confines his remarks on treatment to these three points, and speaks—first, of means of retardation and resolution; second, of means of extirpation; and, third, of means of prevention.

1st. *Means of Retardation and Resolution.*—The growth of all cells in the vegetable, as well as in the animal world, is more or less dependent upon certain external circumstances which are under the control of man; thus their development is favoured by an elevated temperature, a proper supply of moisture, room for expansion, and by certain localities. The author, therefore, points out the influence which cold, dryness, pressure, and locality, exercise, as means of retarding morbid growths.

2. *Means of Extirpation.*—These are two: 1st, excision of the part; 2nd, chemical agents which destroy texture.

As regards excision, Dr. Bennett arrives at the conclusion, that, as soon as it becomes evident that means of retardation have failed to arrest the progress of the growth, an operation should be had recourse to. If early excision were more practised, he thinks that

many of the lamentable cases which occur in practice would never arise. Many tumours which need cause little alarm during youth, become more dangerous as the age advances towards 35, and from that to 50. Thus, in a young person, longer time may be devoted to the employment of retarding and preventive means, than it would be prudent to do in adult age.

Many surgeons refuse to operate in cases of advanced cancerous tumours, on the ground—1st, that cancer is in its nature incurable; 2nd, that it is cruel to inflict on a dying individual a surgical operation destined to be of no ultimate advantage; and 3rd, that such operation, if performed, would hasten the fatal termination. Dr. Bennett combats these arguments *seriatim* at considerable length, and maintains that any tumour, so long as it continues to return in the same place, should be excised. He says—"So long as a cancer remains fixed in a part which is capable of being removed, and the strength of the patient is not too much reduced, so long is the surgeon warranted to interfere." He considers that, with reference to treatment, our efforts should be directed to ascertaining the laws which regulate the return of these growths, and to this end, not only should tumours themselves be carefully examined after extirpation to ascertain their nature, but the microscope ought to be employed during an operation, to ascertain whether the neighbouring tissues contain cancer cells or nuclei. In one case he found the muscles in the neighbourhood of the tumour so loaded with cells, that at the time he prognosed the return of the disease, which, ultimately, killed the patient.

3. *Means of Prevention.*—All empirical means directed to the general treatment of cancer have failed. We are ignorant of the original cause of the disease, and rational medicine is therefore powerless; but the author thinks an observation of the phenomena accompanying it may lead us to more useful hints. He points out that tubercle is essentially different from cancer; occurs at another epoch of life; and is materially modified by the exhibition of animal oils. He suggests that an opposite line of treatment to that found useful in the one disease, is likely to be beneficial in the other. An excessive cell development, such as occurs in cancer, must be materially influenced by diminishing the amount of fatty elements, which originally furnish elementary granules and nuclei. Fat, however, is essential to a healthy nutrition, and there will always be a difficulty in so regulating ingesta as, while on the one hand we prevent such an excess of adipose formation as not to favour excessive cell growth, on the other, we may sufficiently contribute to the healthy nutrition of the tissues. The fat which is derived from the secondary digestion, however, should be diminished, by taking care that the excreting organs fully perform their functions. If a tendency to fat be an antidote to tubercle, sparseness may possibly be opposed to cancer. In the one case we should do all we can to bring the nutrition up to, and above the average; in the other down to, and below it.

These views the author acknowledges are hypothetical, but perhaps warranted by the present state of our knowledge. He thinks they lead to the following practical rule,—viz., "that in all wasting diseases caused by mal-assimilation of the primary digestion, the animal oils are directly indicated, and that in all

diseases accompanying accumulation of fatty matter, in the economy they are contra-indicated. In the first class of affections are most scrofulous and tubercular diseases in youth; in the second, cancerous diseases in adult and advanced life. But there are cases of tubercular disease, with tendency to local fatty accumulations, in which oil is injurious; and there are also cases of cancer, with emaciation from want of assimilation, in which it is beneficial."

Proceedings of Societies.

BIRMINGHAM PATHOLOGICAL SOCIETY.

March 1, 1849.

D. W. CROMPTON, Esq., in the Chair.

TUBERCULAR DISEASE OF THE LUNGS: PNEUMO-THORAX, FOLLOWED BY EMPHYSEMA OF THE LEFT SIDE: DEATH IN SEVEN MONTHS.

Mr. F. Ryland gave the following particulars of the case:—

—, aged 19, a vigorous and muscular young man, with hereditary disposition to phthisis, after the fatigue and excitement attendant upon a visit in the country, suffered from pain in the left side, cough, dyspnoea, and expectoration of dark, thick, and excessively tough mucus, with quick pulse. This was in the middle of April, 1848. He was relieved by a blister, calomel and opium at night, and antimony during the day. Still he remained weak, pulse 100, and the cough and expectoration continued. In the middle of May he went to Hampstead, near London, for change of air and scene.

He returned on the 19th of June much worse. I examined his chest, as did Dr. Evans, on the 26th. There was dulness on percussion over the left subclavian region in front, and great part of the subscapular region posteriorly. No vesicular respiration could be heard in either situation. Bronchophony existed in front. There was hectic, frequent cough, muco-purulent expectoration, loss of appetite, and strength. Cod-liver oil was tried, and seemed to suit him; he also took an anodyne at night. I went to Scarborough, and Dr. Evans kindly undertook the charge of the patient. On the 3rd of July, Dr. E. was called to him suddenly, and found that rupture of the left lung had taken place, the signs being violent pain and dyspnoea suddenly arising. The left side of the chest enlarged and tympanitic; heart felt beating on the right of the sternum, amphoric respiration, and metallic tinkling. He lies constantly on the sound side.

On the 14th of July, when I returned, the left side was still larger than the other; very resonant on percussion; no respiratory sounds heard on this side, except the amphoric breathing, and some mucous rattle in the upper and posterior part; pulse 130; respiration frequent; cough troublesome.

August 3rd. Patient more comfortable; cough and expectoration notably diminished; pulse reduced to 110. Lies mostly on his back; can lie well on the right side; cannot lie on the left. Left side contracting in size; it contains less air, but more liquid, as is shewn by percussion posteriorly, when he sits up. The amphoric

breathing still audible, but more whistling, as if the aperture of communication between the lung and pleura were contracting. Ordered to take the cod-liver oil again.

September 6th. Both sides of chest measure exactly the same. There is still a little air in the left pleura; cough better; no expectoration; pulse 100; tongue clean. He sneezes frequently, and most violently, and has done so for many days.

20th. Measure of chest the same; the left pleural cavity is now quite full; breathing 27, pulse 120 in a minute; lips and countenance ruddy. Patient comes down every day and goes out when the weather is favourable.

He continued improving till the close of October, when he was attacked by pneumonia of the right side. There was pain, with manifest and extensive dulness of the lower and posterior part of right lung, crepitus in front, rusty expectoration, and great heat of skin. The urine was scanty and high coloured; there was frequent vomiting; the debility was at the same time extreme; he could not sit up for five minutes in the day.

November 2nd. Lips and nails blueish; breathing rapid; pulse 118, and weak; great prostration. The pain in the chest, however, was less, and the expectoration lighter in colour, but still tenacious. He was treated by the administration of mild expectorants, and the application of a blister, and gradually recovered from the pneumonia.

December 4th. Patient has become much emaciated during the last month. There is great resonance on percussion and pectoriloquy under left clavicle, indicating the existence of a large cavity. Below the third rib the left side of the chest is entirely dull. The heart still beats on the right of the sternum. The patient has a good appetite, and takes eight meals a day, and two glasses of sherry.

15th. The chest measured to-day gives the right side unaltered; the left diminished three-fourths of an inch.

From this time the patient gradually declined. For about sixteen days before his death he suffered severely from pain in the left side, aggravated by coughing, or a deep inspiration, and this side of the chest attained again its former size. The breathing became more and more oppressed, and the pulse feeble, and he died on the 11th February, more than seven months after the occurrence of the rupture of the lung.

Post-mortem examination seventy-two hours after death.—Present—Dr. Heslop, Mr. Evans, and myself. Body thin, but not in the last stage of emaciation; chest an inch below the nipples measured 32 inches, and each side exactly 16 inches. On raising the sternum, the left pleural sac was found to be quite full of fluid of a sero-purulent nature, thin at the top, and becoming more loaded with shreds and masses of soft lymph, and with pus, as we got lower into the cavity. The quantity was not measured, but in the opinion of all present, there were quite eight pints. The lung occupied the upper and back part of the thorax, being fixed there by strong organized adhesions. There was one long strap-like projection from the upper lobe extending to the diaphragm and adhering firmly to it. This adhesion had,

no doubt, been contracted before the rupture of the lung took place. We found a large emptied vomica in the front of the upper lobe, and multitudes of tubercles diffused throughout the remaining portion of the lung. Most diligent and careful search was made for the opening of communication between the lung and plural sac, but it could not be found. No amphoric breathing had been heard in the patient's chest for some weeks previous to death, nor had he felt the bubbling of the air, of which he had often before complained, and I think it probable that the opening had ceased to exist. The right lung was attached to the costal pleura throughout great part of its surface. Towards the lower and back part, the lymph was thick, and some of it of recent deposit. In some of the adventitious membrane, small flattened tubercular masses were found. The lung itself was crepitous; it contained numerous tubercles in various stages, and some small cavities of the size of horse-beans.

The heart was found rather to the right of the sternum; its walls were thin and flabby, its valves healthy. The chief points of interest in this case are:—The sudden occurrence of the pneumo-thorax on the 3rd of July, (occasioned, I presume, by the bursting of the vomica into the sac of the pleura); the shock and the impediment to respiration were nearly fatal. The constitution rallied from the shock and accommodated itself to the impeded respiration. Liquid gradually accumulated in the pleura and displaced the air, as shown by percussion, and by the feeling of bubbling of air through fluid, which the patient always felt in coughing or any forced expiration. After the lapse of ten weeks, the air was all expelled and replaced by liquid. At this time both sides of the chest measured precisely the same. The inflammation of the right lung in November was a most serious complication, and nearly proved fatal; but after that was got over, some attempt at curing the hydro-thorax seems to have been made by nature, for in the middle of December the left side had diminished three quarters of an inch.

Death was eventually caused earlier than it would otherwise have occurred by an attack of pleurisy sixteen days previous to that event; for so I read the supervention of severe pain in the left side, aggravated by coughing and a deep inspiration, and attended by an increase of the quantity of liquid in the pleural cavity.

In connection with this case, Mr. Crompton referred to another case which had come under his notice, in which pneumo-thorax took place, in a young man, apparently in good health, the day after an attack of pleuritic pain. He lived for three or four months. The air in the chest soon gave way to fluid. His lungs were tubercular.

MALFORMATION OF THE HEART.

Mr. Dampier, of Westbromwich, related the following case:—

The patient was a male child $4\frac{1}{2}$ years of age. He died suddenly. Mr. Dampier examined the body under the Coroner's precept. He knew nothing of the case during life, but collected the following particulars from the friends. He was an intelligent child; blind from birth; of ordinary size and development, except some defect in the lower limbs, for he never walked, and the distal phalanges of the fingers and toes were bulbous.

His general aspect was livid; he was subject to severe attacks of palpitation of the heart and dyspnoea, and frequently passed blood by stool.

Sectio Cadaveris.—External appearance livid; lips and tips of fingers and toes, of a deep purple. There was a large quantity of serous fluid in the pleural sac. The lungs were healthy, but somewhat congested; there was some fluid in the pericardium. The heart is large, the increase of size is owing chiefly to hypertrophy of the right side; there is also a remarkable modification of form, the right side of lower border (the *margo acutus* of normal anatomy,) being much more rounded and obtuse than the left or upper border. The right auricle is dilated to three or four times its natural capacity. The foramen ovale is wide open; the tricuspid valve is thickened and fringed on its auricular surface with small vegetations; its aperture is considerably diminished in extent, admitting barely one finger. The right ventricle is greatly hypertrophied, and its cavity almost obliterated; it would not hold more than two drachms. The valves, which are of unequal development, are stretched across the narrowed canal, and joined in the centre by the union of their free borders, one of them projecting into the cavity of the vessel in the form of a nipple-shaped process, with a perforation at the apex admitting the point of a probe. The pulmonary artery is of ordinary size; the ductus arteriosus is open, and just admits a probe. The left auricle and pulmonary artery of ordinary size. Left ventricle also hypertrophied, its walls being about half the thickness of those of the right aortic valves, and aorta normal; mitral valve also.

MENINGEAL APOPLEXY IN THE BRAIN OF AN INFANT.

Dr. Heslop presented the brain of an infant, who died suddenly three days after birth.

The mother had been admitted into the General Hospital, under the care of Dr. Evans, as a case of dropsy, but on examination, proved to be pregnant. Labour came on a few days after admission. The child presented in the first position of Naegle. From great narrowing of the passages, the second stage of labour was prolonged; but the child breathed and cried vigorously the moment it was born. There was one circumstance worthy of note about the mother's previous condition, namely, her urine was moderately albuminous. The brain was highly congested, and there was considerable extravasation of blood in the substance of the pia mater. This was particularly observed on the inferior surface of the cerebellum, and in the tuber annulare. The arachnoid cavity contained a large quantity of sanguinolent fluid.

This must be considered a case of meningeal apoplexy, the commonness of which, in early life, has been lately made the subject of many and accurate observations.

PULMONARY APOPLEXY: EMPHYSEMA AND DISEASED HEART.

Dr. Heslop gave the particulars of the following case:—

Heart: its right cavities greatly dilated; auricular orifice enormously enlarged; universal emphysema of the lungs; and pulmonary apoplexy.

The patient was under the care of Dr. Eccles, whose patient he had frequently been previously, for chronic bronchitis and emphysema. He had been for some time an out-patient; but finally finding his dyspnoea increasing daily, he consented again to become an in-patient. He was admitted in an almost moribund condition; face almost black; dyspnoea intense. Severe hæmoptysis came on in a few hours, and he sank on the day of his admission. The lungs were found to be universally emphysematous; the right lung contained many masses of pulmonary apoplexy. But Dr. Heslop wished particularly to draw the attention of the Society to the heart, which exhibited very well the retrograde effects in that organ of prolonged pulmonary obstruction. It was generally enlarged; but this enlargement was principally in the transverse direction. The apex of the heart was formed by the *right* ventricle. The capacity of this ventricle was much increased, and its walls thinned. The same conditions existed in the right auricle. The right auriculo-ventricular orifice was greatly enlarged, admitting almost the entire hand. This man had been dropsical, but there was never any murmur with the heart's sounds. There can be no doubt of the great importance of attention to the condition of this orifice, but which has, perhaps, not been as fully recognized by the great body of the profession as it deserves.

A LARGE NUMBER OF SMALL IRREGULAR GALL STONES OF CHOLESTERINE.

Dr. Fletcher mentioned the case of a female, aged 45, (her sister had malignant disease of the liver,) who applied to him with symptoms of hepatic disorder; she had had jaundice at intervals. He suspected the existence of gall stones, and those now presented were passed at once soon after.

A NUMBER OF GALL STONES (TWO OF VERY LARGE SIZE) PASSED AT ONE TIME.

Dr. Fletcher also mentioned the case of a female, aged 48, seen by him in consultation with Mr. Dampier, whose symptoms were severe but were of very short duration. There had not been jaundice. The patient had never passed stones before, and she recovered very quickly. Two of the calculi were of large size, and appeared to have originally formed one stone. The largest fragment, irregularly cylindrical, was an inch in diameter. There were besides a large number of small ones, multangular. They were composed of cholesterine.

MEMORIAL TO SIR GEORGE GREY, BART.

The Memorial of the Associated Physicians and Surgeons of Shropshire and North Wales, and of other Physicians and Surgeons practising in the Provinces.

Your Memorialists, in expressing their gratitude for the laudable anxiety you have evinced to bring the question of Medical Reform to a successful issue, cannot refrain from again pointing out to you, that no adjustment of the grievances under which the profession has so long laboured will be conclusive or satisfactory, unless a just and fair system of representa-

tion is accorded to the great body of the members in their several Colleges.

And it is matter of much regret to your Memorialists, that no indication of any intention to carry this into effect appears in the scheme emanating from a Conference of the Corporate Institutions; but, on the contrary, that further arbitrary powers are to be conferred on the College of Surgeons, and its members to be dissociated from that College, in which they have acquired their diploma and title.

Your Memorialists would fain hope, that in legislating on this subject a wise government would not withhold from a body of educated men, in their respective Colleges, that boon which in Municipal Institutions has been accorded to every rate-payer in the kingdom.

Your Memorialists consider the institution of a new College of General Practitioners as a great public and professional calamity,—uncalled for in a Profession wherein the most crying evil has always been the unnecessary multiplication of Institutions, and the diversity of their several qualifications; but when it is proposed, by the establishment of such new College, to perpetuate grades and distinctions which have no existence in reality;—to confirm the monopoly and injustice of the older Institutions, and to allow them to repudiate their proper members, in order that they may become tenant occupiers of a College possessing neither a Medical nor Surgical title;—your Memorialists cannot but look upon such a scheme as pregnant with future evil, if not degradation, to the profession, and they sincerely trust you will not sanction the establishment of any such ambiguous Institution.

Your Memorialists may state with confidence, as the universal sentiment of the profession, confirmed by a host of most respectable evidence adduced before the Medical Registration Committee, and previously before the Education Committee of 1834, that no scheme of Medical Reform can be effectual or permanent, unless it provide for the efficiency and respectability of the whole profession, by securing for all the adoption of one uniform standard of education, combined with such examinations as shall be a fair test of qualification in each of those sciences, a knowledge of which may be considered necessary to the formation of a competent Medical and Surgical Practitioner.

Now your Memorialists would observe, that the scheme of the Conference comprises no such uniformity of education, but, whilst it stringently provides for the lowest grade being instructed equally in medicine and surgery, would permanently establish, if sanctioned by the legislature, the practical absurdity (as has been well pointed out in the memorial from Manchester) of the Fellow of the College of Surgeons being authorized, *without any MEDICAL examination whatever*, not only to practice every department, but further to do so with the prestige of superior rank; and would, in like manner, leave the Fellows and Associates of the College of Physicians devoid of any test of their having obtained a knowledge of the principles of surgery.

Your Memorialists therefore earnestly entreat you to counteract so gross an anomaly, by providing, in any Bill to be introduced into Parliament, such a modification of the Colleges of Physicians and Surgeons, as shall insure that all their members, of whatever grade they may be, shall undergo, in the first instance, a joint and uniform test of their qualification to practice both

in medicine and surgery; and your Memorialists consider such an arrangement not less requisite for the well-being and harmony of the profession, than for the safety of the public.

As another advantage of such uniformity of education, your Memorialists would point with pleasure to the facility which it will afford for a simple and effectual plan of registration; nor have your Memorialists any objection to the division of labour, and the consequent partition of the profession into the two classes of physician and surgeon, or again, of each of these into a higher and lesser grade; but other titles and designations, more particularly if necessitating or leading to the formation of a new college, whereby future practitioners are to be alienated from the time-honoured institutions of their ancestors, would, in the estimation of your Memorialists, not only be superfluous and uncalled for, but positively injurious.

Your Memorialists, in conclusion, are extremely anxious that no scheme, having for its object further monopoly or aggrandizement on the part of the Corporate Bodies, should obtain your approval or concurrence; but that the just requirements of the profession and the public should be embodied in a liberal and comprehensive measure of Medical Reform, based on the principles of

“Representation” for the members in their several colleges;

“Uniformity of education;” and

“Assimilation of qualification”

for like degrees and titles throughout the kingdom. Such a measure, your Memorialists conceive, would be beneficial to the public, and satisfactory to the profession.

HENRY JOHNSON, M.D., Shrewsbury,
President of the Shropshire and North Wales Association.
May, 1849.

CONVENTION OF POOR LAW MEDICAL OFFICERS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,—I am desired by the Committee to request the favour of your publishing in the next number of the *Provincial Medical and Surgical Journal*, the Report of the interview with the President of the Poor-Law Board and a Deputation from the Committee, on the subject of Poor-Law Medical Relief.

I am, Sir, your most obedient servant,

HERBERT WILLIAMS,
Assistant Secretary.

4, Hanover Square, June 5, 1849.

A deputation from the Committee, consisting of Dr. Hodgkin, Chairman, Dr. Barnett, Mr. Vallance of Stratford, Mr. Ebsworth of Bulwell, Mr. Ross, Mr. Mitchell, Mr. Porter, Mr. Peter Martin of Reigate, Mr. White and Mr. Lord, the Hon. Secretary, was received on Thursday, the 24th inst., by the President of the Poor-Law Board, at Somerset House.

Dr. Hodgkin being absent on the entrance of the

deputation, the business was entered upon by Mr. Vallance, who begged that the case might be judged of, not by his feeble advocacy, but its inherent strength and justice, adding, that although he had personally little or nothing to complain of, his own Board having acted with something like liberality and fairness, he was induced to join the deputation from a thorough conviction and long knowledge of the just claims of the medical officers. After dwelling upon their very insufficient mis-called remuneration, which varied from 2½d. to 14s. 4d. per case, and shewing that the cost of drugs alone, as stated by Dr. Riggsby and Mr. Farre, is 2s. 1½d., in dispensaries, and 3s. 7d. per case in hospitals, he asked, could it ever be pretended that the medical man was paid by 2s. 6d., the country average, for attendances and medicines? He would not insult the judgment of Mr. Baines by arguing the point. It was conceded by the resolution of the House of Commons in 1838, recommending a considerable increase, also by the feeling of the House in 1844. Lord Ashley strongly and truly expressed the opinion, that the medical officers could not properly perform their duties unless they received an income suitable to the magnitude of those duties—that they ought to be able to occupy the position that belonged to them as educated men, entrusted with great, indeed fearful, responsibilities. Mr. Vallance next urged the importance of making the appointments permanent—"quandiu se bene gesserit"—and proved the fallacy and injustice of treating the union surgeon as the only officer subject to a precarious tenure of, or capricious dismissal from office. He concluded a lucid statement by somewhat adroitly, though respectfully, reminding the President, that in ancient times a potentate began his reign by an exertion of mercy or of justice—that nothing would better become his high position, or be more graceful, than his yielding, in mercy to the sick poor, fair and impartial justice to the claims of the medical officers. All that the Committee seek may be comprised in—payment proportioned to duties; permanence of appointment during good conduct; and, responsibility to professional authority.

The President replied that nothing could be better than the manner in which Mr. Vallance had stated the case, and that he was very much obliged for the information the deputation had placed before him. He was perfectly aware of the hardships under which the union surgeon laboured, and felt very desirous to have them removed; he was himself a professional man, and had much sympathy with gentlemen so situated, and wished to see them requited on a scale befitting their station. His power, however, had been much overrated; he was not absolute. He had been informed that Mr. Buller, in considering the question, found difficulties increased upon him as he proceeded. An extension of the power of the commission, to enable it to carry out such measures as the deputation sought, could only come through Parliament. That in Parliament many of the members were *ex-officio* guardians, watching every proposed change with attention, while from local knowledge in their own districts, they were able to speak to facts, and took an interest in the proceedings of the Boards of Guardians.

Mr. Vallance reminded the President that in the Report of Lord Ashley's Committee, he would find it stated (he thought by Mr. Lewis,) Poor-law that the

Commissioners had now the power to declare all medical appointments permanent.

Mr. Lord said that he knew the President dwelt very much upon a power for giving redress which was in the hands of the guardians. A member of Parliament who had been imbued with these views remarked to him, that it appeared to him that this power, unchecked by the Commissioners, ought in all cases to be an adequate remedy, "if the Guardians act fairly and reasonably." The deputation particularly desire to impress upon the mind of Mr. Baines, the fact that the Poor-law Medical Staff, from long and painful experience, have lost all reliance upon those bodies acting in that way. The *ex-officio* Guardians, the clergy, and the more intelligent members of local boards, were, equally with the Poor-law Commissioner, disposed to act with considerate liberality towards the medical officers, but who were defeated from time to time in their endeavour to do so, by the farmers and tradesmen, who too often carry out their merely commercial views, and combine to keep down the salaries on the single, though short sighted principle of keeping down the rates. To so great an extent is this often carried, that the very orders of the Commissioners are frequently opposed or set at naught. In illustration of these points, he read extracts from public documents and letters, which had been received by the Committee from persons of the highest respectability. The Committee, therefore, feeling strongly the importance of awakening attention, in the House of Commons, to the false system on which the Poor-law medical relief is based, prepared forms of petitions to be returned from numerous parts of the kingdom, many of which had already been presented, and more had been received for that purpose. The clergy and magistrates in many instances had taken part with them, as the following extract from a letter which had been received from Mr. Cowley of Winslow, testifies:—"I have, (states that gentleman) drawn out a general petition, and obtained the signatures of nearly all the magistrates, and most of the clergy resident in the union, and have no doubt shall have the name of every one. They all express much sympathy with medical officers of unions, and surprise that similar petitions are not adopted in every union."

The President here observed, that such efforts, carrying with them the manifest co-operation of other classes than the medical officers, would be likely to have considerable weight with the Legislature.

Mr. Lord rejoined that the Committee had done much, and would yet do more, to draw public attention to the subject, and to cause the public at large to know how utterly inadequate was the pay for the public advantage conferred through the services of the 3000 gentlemen composing the Poor-law Medical Staff. The powerful writer in *The Times*, under the signature of "S. G. O.," had so given his aid in furtherance of the claims of the sick poor, and those of the union surgeons. Through these various modes of exciting interest and diffusing information, the Committee hope to exert an influence in the House of Commons, which at least might strengthen the President, so as to enable him to carry into operation such measures as he believes to be right.

Mr. Baines inquired if the Committee were unanimous in approving the proposed plan of medical relief appended to the memorial to Sir George Grey;

observing, that it was a matter of great pleasure to notice how well the medical men generally performed the arduous duties of their engagements, and how very few complaints against them reached that office. Respecting the salaries, a great additional difficulty arose from the readiness with which medical gentlemen accepted the appointments.

Mr. Vallance having explained the vigilance of self-protection, which induced men of character and capability to take office under the Poor-Law, the President added, that he was quite aware of the motives, irrespective of the pay, which induced many gentlemen to fill these offices, and that though such were not fair arguments against their complaints, they gave a pretext to some for not interfering with the present system.

Mr. Peter Martin said, that unfortunately, it was only a section of the entire body of the profession who were thus exposed to the hardships complained of; were the profession generally direct sufferers, there would be more chance of co-operation to resist or prevent an injurious competition.

Mr. Ebsworth, of Bulwell, reminded the President of the immense and wide inequality between the payments made to union medical officers, the difference being observed even amongst the members of the deputation themselves. The Poor-Law Commissioners sanction the salary of £100 for duties performed in one union workhouse of less size, with inmates, and attached to a far less number of parishes, whilst in his own case he received £45. How did this inequality arise? On what principle of justice could it be upheld? Did medical officers know beforehand the duties they would have to perform, for the salaries advertised, none would have the hardihood to accept office on the terms. This deputation was of opinion that Mr. Baines, as President, had the power, at least to alter the anomaly of the present medical regulations. It was not equitable that the paupers of one district should be provided with a worse-paid medical officer to attend them in their sickness, nor could it be supposed that the diseases of one county required a more expensive class of medicines than another. If the President would look into the circumstances of each union, and learn the nature and extent of the duties of each individual medical officer, and found thereon a scale of remuneration somewhat approaching to the recommendation of the Poor-Law board itself, the hardships complained of would soon cease. We complain of inadequate salaries and burdensome duties; where other relief is refused, medical assistance is granted; in case of a family being sick from destitution, the head of it having struck for wages, medical orders are granted *ad libitum*, although the law in such instances disqualifies them for receiving general relief. The difficulty in obtaining orders for extras is generally proportionate to the laxity with which sick ones are distributed. All and every complaint made by us might easily be done away with, by the President saying—"By such and such standard shall the remuneration of the medical officer be gauged; I will tolerate no appointment in which an inadequate payment must fail to secure good attention to the poor and good medicaments in their diseases."

The President remarked, that the question of finance was the grand difficulty; throughout the country, the

demands upon the poor-rates had been lately increasing, and he feared that any fresh one made just now would be met from all quarters with opposition. He had no reason to think that any mode of administering medical relief, except as now, through the Boards of Guardians, would be acceptable to the country in general. The plan suggested, of placing the entire cost of medical relief on the consolidated fund was one which Sir George Grey might deal with. In legislating on these matters, no minister or officer of the Crown could begin to form *de novo*, or write, as it were, on a *tableau rasé*, but with such means and systems as were established and much entwined with the feelings and habits of the country.

Mr. Vallance informed the President, that at the interview at the Home Office, last year, Sir George Grey admitted that the money question was secondary to that of procuring efficient medical aid for the sick poor; at the same time he referred the Committee to the then President of the Poor-Law board—the late Mr. Charles Buller.

Mr. Ross, although holding no appointment under the Poor-Law Commission, but acting as *amicus curiæ*, wished to interpose a few remarks. The deputation had believed that the Poor-Law Board exercised a power almost autocratical in the administration of the laws for the relief of the poor, but it now appeared otherwise; and they were given to understand that it was the Boards of Guardians who exerted this arbitrary power, and who were best able to redress the grievances under which the union surgeons laboured. This was, in fact, the point of complaint; it was because the Boards of Guardians had the power, that those evils under which the medical officers were smarting prevailed, and it was to alter this system that the Poor-Law Convention was established. The entire scope of the resolutions agreed to by the Committee, and cited in their memorial to Sir George Grey, went to this effect. These resolutions sought for payment of salaries out of the consolidated fund, in order to obviate the grinding parsimony of local boards; and they desired the establishment of a district medical staff, with the view of removing the medical officer from the jurisdiction of boards frequently composed of persons who were utterly incompetent, by habits of thought and feeling, education, and pursuits, to form a correct judgment on the conduct of their medical officers. Many cases might be cited to prove the injustice of Boards of Guardians towards their medical officers, and of the apparent powerlessness of the Poor-Law Board to redress the wrongs the medical officers are thus obliged to suffer. They are indeed sacrificed between two rival jurisdictions. The Huddersfield case is an evidence of this deplorable state of things. Among other subjects of complaint, Mr. Tatham, the medical officer, applied for remuneration for attendance on a fever hospital established in Huddersfield during the prevalence of fever in that neighbourhood. He had been appointed to the medical duties by a portion of the Board of Guardians, who had acquainted the Board, at one of their meetings, of the arrangement that had been made, which the Board acquiesced in, but neglected to enter it on their minutes. The Board refused payment for these extra services. Mr. Tatham applied for redress to the Commissioners, who recommended the Guardians to grant the required

remuneration, on the ground that it was *inequitable* to expect Mr. Tatham to perform the duties of surgeon to the fever hospital under his contract. The Guardians obstinately refused to act on this recommendation, as also upon other arrangements advised by the Commissioners; and the result was, that the Commissioners themselves suggested to Mr. Tatham the advisability of bringing an action-at-law against the Board of Guardians. This was done; and at the trial the Board of Guardians pleaded their own neglect of duty in not entering the appointment of Mr. Tatham on their minutes, as an answer to his claim. Judge Alderson, in indignation, said that the behaviour of the Guardians was a disgrace to the township; and if he were an inhabitant, he would commence a subscription forthwith, to compensate Mr. Tatham for the losses he had sustained. In this case, either from prudential or legal difficulties, the central Board could take no stronger step, in a cause which he knew to be just, than advise a trial at law. With respect to payment for medical service from the consolidated fund, that was the recommendation in the resolution of the Committee, which, if it could be carried out, would, he believed, be the simplest and best plan for adoption. It had not been agreed to without careful deliberation. Other plans had, however, been adverted to, and he therefore might be at liberty to suggest that, supposing the Government should deem it impracticable, at the present time, to alter the existing system in such a radical manner as this resolution proposed, but still resolved that the payments should be made from the local funds, the remuneration for medical service in such case might be afforded by a uniform rate per cent. being struck, by order of the Commissioners, upon the gross amount of rates raised in each union for general relief, exclusive of the establishment and incidental charges. The gross amount of rates are a standard of the poverty of a district, and the number of claimants—the number of claimants of the liability of the medical officer. Subordinate arrangements might be made to equalize perfectly the remuneration, in a ratio to labour, for the several medical officers of each union. He believed the Poor-Law Board had full power to enforce such an order. Mr. Ross, however, stated this to be a private view of the matter, and pressed the resolution of the Committee.

In answer to a question by Mr. Baines, relative to the power of appointing the medical officer on the assumption of payment of salaries out of the consolidated fund,

Mr. Ross stated, that it was contemplated to grant this power to the local authorities, by which the objection of giving undue patronage to a Central Board would be avoided, at the same time that the Boards, having the right of electing, in their judgment, the best man as medical officer, should have no power of unfairly reducing his salary. He himself was daily becoming more convinced that the present system was based on a false principle, and that medical relief should be entirely separated from general relief, and treated as a distinct subject for legislation. Medical relief now constitutes a kind of right for general relief, and Boards of Guardians and relieving officers often refuse the one to avoid the liability of the other, thus inflicting a cruel injury on the poor, and throwing the odium of their own misdeeds on their medical

officer. Poverty is created by society itself, and is not generally so urgent as to prohibit the exercise of a discretionary power in the grant of relief; bodily suffering is a visitation from God, or an accident of nature, sudden, inevitable, imperative. The same machinery cannot be applied to circumstances so widely different in their nature, and he believed that the Poor-laws would never work satisfactorily until this separation was made.

After some further conversation, in which Dr. Hodgkin and others took part,

Mr. Baines stated, at the conclusion of the interview, that he was obliged for the opportunity which had been afforded him of gaining information and hearing statements, some of which were new to him; that being himself new in office, he could not speak positively as to the extent of his present authority. He again assured the deputation that he was quite prepared to view the position of the medical officers as one calling for relief, and this, rather as a matter of justice than mercy, (alluding to Mr. Vallance's concluding remarks,) he should feel it a duty to afford according to his power.

Mr. Mitchell, before the deputation retired, put into the hands of the President a paper, which stated, that in November last, when the cholera was absolutely existing, together with other epidemic diseases, in the parish of Lambeth, a conjoint application of seven of the district medical officers had been made to the Board of Guardians, requesting, in the emergency, additional assistance, or means to procure it, to enable them more satisfactorily to perform their onerous duties; that, upon the refusal of the Board to comply with this prayer, a memorial, supporting its object, was presented to the Board of Guardians, signed by nearly all the respectable medical men of the parish, most of the clergy, many of the respectable inhabitants, and even some of the magistrates, which, although productive of no immediate benefit to the medical officers, clearly shows that growing sympathy with the greatly oppressed Poor-law Medical Staff is being felt by the medical profession generally, and among the respectable orders of society, through whose combined influence it may be hoped that, eventually, important and salutary changes may be effected in the existing laws.

General Retrospect.

MEDICINE.

HYDROPHOBIA SPONTANEA.

Such is the appellation bestowed by Dr. Mombert upon a case recently published by him, of a most interesting character in its details, though unfortunately imperfect, from the absence of a *post-mortem* examination.

Dr. Mombert was sent for early on the morning of the 24th July, to see a lad, aged 12, who had been indisposed for a day or two before, apparently from having become chilled while hot. He found him with a slow and feeble pulse, pain in the head, contracted pupils, and difficulty of deglutition; his secretions, tongue, and skin, being in a normal condition. While quickly talking, he suddenly started from the arms of

his parents, struck his head with the rapidity of lightning, screamed aloud, and distorted his eyes and limbs in the strangest manner. In a few minutes all was calm, and he continued his narration. This paroxysm produced little effect upon his pulse, and was repeated with the same vehemence every few minutes, the attacks differing from epilepsy, in the retention of complete consciousness. Sinapisms to the feet, warm clysters, and calomel were ordered.

Two hours after, the author found the parents vainly engaged in trying to administer a powder in water, the child declaring he could not swallow, and raging frightfully when they attempted to make him do so. He crushed the spoon between his teeth, and the fluid flowed out at the angles of the mouth. The same occurred when water or chamomile tea was offered. He ate an apple, however, thick potato-soup, and the like, with appetite. He declared his willingness to take anything, but that he could not get fluids down, and shuddered at their mere sight. No affection of the throat existed. The paroxysms of convulsions, screams, and raging continued, so that several strong men could scarce restrain him. As the carotids beat strongly, the pulse had become hard and quick, and the pain in the head was very great, cold was ordered to the head, and a venesection at the foot. But when the patient attempted to place his foot in water, the hydrophobic symptoms redoubled in intensity; and when, by the exertions of four men, he was made to do so, the ghastliness of his features evidenced the anguish he endured. His respiration became short; he could neither swallow nor spit out his saliva; and now commenced biting those about him. For awhile after the venesection, the paroxysms seemed less intense, but towards the afternoon they returned as badly as ever; his propensity to bite those about him, or even himself, increasing. When those who held him slackened their hold, he, in the full possession of consciousness, entreated his friends to keep at a distance, lest he should bite them. No mitigation after this occurred, and he died at three o'clock in the afternoon. The most careful external inspection showed no traces of any bite, and his relatives felt certain he had not been bitten; and yet the symptoms were not to be distinguished from those which the author had witnessed in true hydrophobia. All the persons bitten by him continued well.—*Walther and Ammon's Journal and British and Foreign Medico-Chirurgical Review.*

SURGERY.

RECOVERY AFTER AN IRON ROD WEIGHING THIRTEEN POUNDS HAD PASSED THROUGH THE SKULL.

Dr. Harlow records the following almost incredible case:—

A man, aged 25, was charging a hole preparatory to blasting, when the powder exploded, driving the ramming iron against his face, immediately under the angle of the lower jaw. Taking a direction upwards it passed under the zygomatic arch, and entered the cranium, passing through the anterior lobe of the brain, making its exit at the function of the coronal and sagittal suture, breaking at the brain, and fracturing the

parietal and frontal bones extensively. The iron was three feet long, and one and a quarter inches in diameter. The patient was thrown on his back, and was convulsed, but spoke in a few minutes. On his arrival at home, he got out of the cart in which he was conveyed, and with assistance walked up-stairs. When seen by Dr. Harlow, an hour after the accident, he was perfectly conscious, but exhausted by hæmorrhage. After a sufficient examination to convince him that the iron had really traversed the skull, the wounds were dressed. The man recovered perfectly after extensive suppuration and separation of large quantities of cerebral matter.—*Boston Med. Journal*, Dec. 13, 1848.

TREPHINING FOR EPILEPSY.

Dr. J. G. F. Holster relates (*Western Lancet*, Feb., 1849), a case of epilepsy in a female twenty-five years of age, who has been afflicted with the disease for twenty years. On examination of her head, he found a cicatrix on the posterior part of the parietal bone, which she stated had been produced by a stroke with an axe when she was five years of age. On cutting off the hair, a portion of bone two and a half inches by one inch, appeared depressed; and the part was excessively tender to the touch, and was often the seat of great pain. Dr. H. therefore determined to remove the depressed bone, which he did on the 25th of July, which was followed by great relief, the patient saying she had not felt so well for twenty years. At the date of the report, September 11, the wound had firmly cicatrized, and the patient had been free from fits.

Dr. H. performed a similar operation five years before, but without relieving the patient from her disease. In this case a splinter of the inner table of the cranium, an inch long, had passed through the longitudinal sinus.

Some years since several cases of epilepsy, successfully treated by trephining, were reported by Professor Dudley, of Lexington.—*American Journal of Medical Science*, April, 1849.

MIDWIFERY.

TINCTURE OF CANNABIS INDICA IN MENORRHAGIA.

Dr. Churchill has spoken strongly in favour of the powers of Indian hemp in sanguineous uterine discharges. It appears that this property was discovered accidentally by Dr. Maguire, who prescribed it for neuralgia in a female, also at the same time suffering from menorrhagia. Dr. Churchill finds that in simple menorrhagia, the discharge is often stayed in twenty-four hours by five drops of the tincture three times a day. In other cases, where the discharge returns too frequently, it has also proved useful. He has also tried it with advantage in threatened abortion and in the hæmorrhage from uterine cancer. He does not explain the *modus operandi*.—*Medical Gazette*, May 19th.

RECOVERY FROM RUPTURE OF THE UTERUS.

Mr. Church, of Sittingbourne, narrates an instructive case of this rare termination:—

Mrs. B——, aged 42, a large, corpulent woman, the mother of nine children, requested me to attend her in her confinement. She had complained of unusual pains in the region of the uterus a month or two previous, which were treated with opiates and laxative medicine.

September 8th, 1848. I was sent for, and found, about two o'clock, a.m., the membranes broken, the labour progressing slowly, with strong pains at long intervals.

9th. Os uteri fully dilated, the head of the child almost pressing on the perineum. Whilst I was sitting by, expecting half a dozen more pains would complete the delivery, she suddenly exclaimed, "What a cramp I have in my belly; if it continues I'm sure I must die!" Supposing, from the cessation of the expulsive pains, that irregular action of the uterus had set in, I gave her thirty minims of sedative solution of opium. Soon afterwards she became sick, and vomited, with difficulty of breathing and cold perspiration, still complaining of the cramp in the abdomen, which I was in hope the opiate would relieve. After waiting during what I considered a sufficient time for it to act, without much apparent benefit, I made an examination, when, to my surprise, I found the head had receded beyond my reach; there was hæmorrhage, and on placing my hand on the abdomen, I distinctly felt the child through the integuments. Being now fully aware of the nature of the case (which I had never before met with, though a practitioner of thirty-five years standing,) I informed the husband of the probability of a fatal termination; and having determined on immediately delivering the woman, I sent him to request the attendance of Mr. Snowden, a neighbouring practitioner. On that gentleman's arrival, I introduced my hand into the uterus, and found that an oblique rupture had taken place, extending from near the fundus towards the left side, through which the child had escaped into the cavity of the abdomen. With considerable difficulty, by the co-operation of Mr. Snowden, at five o'clock, a.m., the delivery was accomplished of a large male child, dead. The placenta was removed with little or no hæmorrhage. Considering there was no chance of the patient surviving long, I directed her to be kept quiet; and after giving an anodyne, I left her. On my visit at noon, I found her much subdued in vital power; in great pain; pulse 120, with slight sickness. Gave her twenty minims of sedative solution of opium, to be repeated every four hours; and ordered a small quantity of gruel to be occasionally given. At my evening visit she was about the same.

10th. This morning most violent vomiting came on, and lasted the whole day, during which a vast quantity of green, acrid matter was thrown off, excoriating the mouth and cheek, over which it ran. Towards the middle of the night, by the steady administration of four drops of Scheele's prussic acid, in mucilage, every four hours, it abated, leaving the patient in a most exhausted state, full of pain, and with the abdomen much distended. I gave her an opiate, ordered arrow-root and milk to be given, in small quantities, through the night, and left, without a hope of seeing my patient alive in the morning.

11th. Eight a.m. Found she had passed a restless night, with occasional vomiting; pulse 120; tongue brown; great pain, tenderness, and distension all over the abdomen. Ordered the abdomen to be fomented with flannels wrung out in hot water. At noon violent diarrhœa came on, and continued throughout the day and night. Gave compound chalk mixture, with tincture of opium, every three hours. Lochia, which had never ceased, now became profuse.

12th. Diarrhœa abating; she vomited frequently; in a great deal of pain; pulse 110; brown, dry tongue; much tenderness and distension of the abdomen. Applied a blister to the epigastrium. Ordered one grain of calomel and one grain of opium to be given night and morning, with two tablespoonfuls of a mixture composed of carbonates of soda and magnesia, and peppermint water, every four hours.

13th. Vomited less; complained of cramp; abdomen distended; pulse 110; furred, brown tongue; much pain. Medicines continued.

15th. Vomiting had ceased; great hardness and distension of the abdomen. I this day observed a slight blush of redness, of the circumference of a common tea-saucer, inclining to the left of the umbilicus.

16th. Much improved; pulse 100; tongue cleaning, and moist at the edges. Omitted calomel. Gave effervescing medicine, with tincture of opium. She continued thus, without much alteration, until the 23rd, when the redness of the abdomen left, hardness and distension remaining.

25th. Redness suddenly returned, of the same circumference as before, in the middle of which a small swelling of the size of half a walnut was seen, apparently containing matter. Ordered poultices to be applied on this and following day.

27th. Abscess burst in the night, discharging over the bedstead a hand-basinful of fœtid matter, besides what was absorbed by the bed clothes. Pulse rapid; fainting, and great perspiration.

28th. Continued discharge of fœtid matter; violent local inflammation and sloughing of the integuments, to the full extent of the previous redness. Pulse 120; great perspiration. Gave large doses of sulphate of quinine and diluted sulphuric acid, with tincture of opium. Ordered beef-tea, port wine, &c.

29th. Purulent discharge great externally, through the abdominal aperture; similar discharge now came per vaginam; the integuments over the space of a tea-saucer all sloughed away, leaving the muscles of the abdomen exposed. Continued quinine, acid, and tincture of opium, in decoction of cinchona, every four hours. Ordered to be taken daily a pint of port wine, a pint of Guinness's stout, one pound of meat, beef-tea, &c.; fortunately, my patient's appetite was equal to the occasion.

30th. Discharge very great from the external opening as well as from the surface of the sore, which looks more healthy. Tongue almost clean; pulse 100; great perspiration and debility.

Oct. 1st. From this day the sore granulated kindly; the matter externally and internally became healthy. The hard substance, whence the internal matter

proceeded, which I presume to be the uterus, gradually lessened, and was seemingly attached to the walls of the abdomen.

16th. Discharge of matter per vaginam ceased, though still great from the external opening in the abdomen. The space in the integuments continued filling up with healthy granulations. From this time to November 17th, 1848, she continued to improve, on which day all discharge had discontinued, and the wound healed, leaving a large puckered cicatrix. Underneath, seemingly attached to the walls of the abdomen, was a hard substance, of the proportion of a middle-sized lemon. She is now, with the aid of a suspensory bandage, able to get about and attend to her family.—*Lancet*, May 19.

Medical Intelligence.

COD-LIVER OIL IN PHTHISIS.

From the small number of communications received by Dr. Ranking on the subject of his inquiries respecting the value of cod-liver oil in phthisis, he supposes either that its use is not general among the members of the Association, or that the cases in which it has been given have not been registered with sufficient accuracy to justify reporting. Dr. Ranking therefore respectfully requests, that those members who may be disposed to assist him in his inquiries, will make observations on six cases each of consumption, as they present themselves, noting as accurately as their engagements will allow the following circumstances:—

1. Age.
2. Sex.
3. Hereditary history in reference to phthisis or scrofula.
4. Stage of the disease as indicated by the physical signs.
5. Paternal symptoms.
6. Presence or absence of hæmoptysis.
7. Dose, quality, and mode of exhibition of the oil.
8. Effects—good, bad, or negative.
9. General observations.

POISONING BY LOBELIA INFLATA.

This powerful medicine is still extensively employed by quacks, and we are informed that, from the injudicious use of it, a person who had placed himself under the hands of a herb doctor in the north of England has lately lost his life. At the inquest, it was proved by two medical witnesses that the deceased had died from the effects of the lobelia inflata. A verdict of manslaughter was returned against the quack.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, May 25th, 1849:—G. E. Williams; S. Wade; H. B. Tate; R. Donaldson; J. B. Ruck; J. D. Hulme; H. Tapley; C. G. Wheelhouse; C. J. Bullock; T. Johnson.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Members Tuesday, May 31st, 1849:—Thomas Bryant, Kennington Common; Wm. Cater, Northwold, Norfolk; Charles James Shearman, Rotherham; George Hulme Beaman, King Street, Covent Garden.

OBITUARY.

Died, May 30th, at the residence of his friend, Spencer Freeman, Esq., Stowmarket, William Copperthwaite Clough, Esq., Surgeon, aged 40.

Lately, at the Parsonage, Poynton, Cheshire, Joseph Bellott, Esq., aged 82, Consulting Surgeon to the Stockport Infirmary.

BOOKS RECEIVED.

Objections to the Indiscriminate Administration of Anæsthetic Agents in Midwifery. By W. F. Montgomery, A.M., M.D., M.R.I.A., Professor of Midwifery to the King and Queen's College of Physicians in Ireland. Dublin: Hodges and Smith.

The American Journal of the Medical Sciences. Edited by Isaac Hays, M.D. No. 34. April, 1849. Lea and Blanchard, Philadelphia. 8vo pp. 280.

An account of the Origin, Spread, and Decline of Epidemic Fevers, of Sierra Leone, with Observations on Sir William Pym's Review of the "Report on the Climate and Diseases of the African Station. By Alexander Bryson, M.D., R.N. London: Henry Renshaw. 1849. 8vo pp. 174.

A Practical Treatise on Inflammation of the Uterus and its Appendages, and on Ulceration and Induration of the Neck of the Uterus. By James Henry Bennett, M.D., Member of the Royal College of Physicians, Physician Accoucheur to the Western General Dispensary, formerly House Physician (by Concours) to the Hospitals of St. Louis, Notre Dame, De La Pitié, and La Salpêtrière, Paris. Second Edition, greatly enlarged. London: Churchill. 1849. 8vo pp. 528.

The Medical Examiner and Record of Medical Science. Edited by F. G. Smith, M.D., and David H. Tucker, M.D. New Series. Vol. 5. Nos. 2, 3, and 4. Philadelphia: Lindsay and Blakiston. 1849. 8vo, pp. 80.

London Journal of Medicine—a Monthly Record of the Medical Sciences. No. 6. June, 1849. London: Taylor, Walton, and Maberly. 8vo pp. 100.

Portraits of Diseases of the Scalp, with the Safest and most Efficient Modes of Treatment. By Walter Cooper Dendy, Senior Surgeon to the Royal Infirmary for Children, &c. London: Highley, Fleet Street. 1849.

The American Journal and Library of Dental Science, Vol. 9, No. 2, published under the auspices of the American Society of Dental Surgeons. Editors: C. A. Harris, M.D., D.D.L.; Amos Westcott, M.D., D.D.L.; Wm. H. Durnelle, D.D.L. Baltimore: Armstrong, and Berry. 8vo pp. 154.

The British Record of Obstetric Medicine, Surgery, and Diseases of Women and Children. By Charles Clay, M.D., Manchester.

Anæsthesia: or the Employment of Chloroform and Æther in Surgery and Midwifery, &c. By J. Y. Simpson, M.D., F.R.S.E., &c. Philadelphia.

Proceedings of the Westminster Medical Society. Session 1848-49. 8vo, pp. 16.

Examination of the President and Examiners of the

Royal College of Physicians of London, and of the Medical and Surgical Corporate Bodies of the United Kingdom, with an Analysis of the Evidence given before the Select Committee of the House of Commons, and suggestions for an Improved System of Medical Government. By Edwards Crisp, M.D., M.R.C.S., L.A.C. London: Wilson. 1849. 8vo, pp. 58.

Monthly Journal and Retrospect of the Medical Sciences. London Editor—G. E. Day, Fellow of the Royal College of Physicians, London. Edinburgh Editors—Alex. Fleming, M.D., W. T. Gairdner, M.D. June, 1849. No. 36. New series. Sutherland and Knox, Edinburgh; Churchill, London. 8vo, pp. 96.

British American Journal.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

NOTICE TO MEMBERS.

Gentlemen who have not yet paid their subscription for the current year, or who are in arrears, are requested immediately to forward the amount due to the Secretary or Treasurer of the Association, as the accounts are now about to be made up for the Annual Meeting.

* * As the list of Members is about to be published in the next Volume of the "Transactions," gentlemen whose addresses are not correctly stated in the last volume, are requested to forward the alteration immediately to the publishers, Deighton and Co., Worcester.

J. P. SHEPPARD,

Secretary to the Association *pro tem.*

TAUNTON AND SOMERSET BRANCH MEETING.

The Annual Meeting of the Members of this Branch will be held at Pattison's Castle Hotel, Taunton, this day (Wednesday,) the 13th of June. G. Brock, M.D., President; H. Alford, Esq., F.R.C.S.E., President-elect. The Chair will be taken at 2 p.m.

FRANCIS HENRY WOODFORDE, M.D.,

Honorary Secretary.

Taunton, May 26, 1849.

SUFFOLK BRANCH MEETING.

The Anniversary Meeting of the above branch of the Association will be held at Hadleigh, on Friday, the 15th of June.

Members of Council will meet at the residence of the President Elect, John Growse, Esq., at one o'clock, and the chair will be taken at the general meeting, at two o'clock precisely.

Those members who cannot attend will oblige me by forwarding any communication they may wish to be brought before the meeting. Short papers or interesting cases will be acceptable. Dinner at five o'clock.

The contiguity of Hadleigh to the county of Essex will, we trust, be taken advantage of by members of the Association, or their friends, residing in that county.

C. R. BREE, Hon. Sec.

SOUTH-EASTERN BRANCH MEETING.

The annual assemblage of the members of this branch will take place at the Town Hall, at Brighton, on Wednesday, the 27th instant, at one o'clock *precisely*,

ISAAC HARGRAVES, Esq., President,
Dr. JENKS, President Elect.

When the business of the meeting is concluded, the members will dine together. The charge for a cold dinner, beer, dessert, coffee, and waiters, will be five shillings. Wine a separate charge.

As a visit to Brighton may be very agreeable to many distant members of the Association, who are not members of this Branch, the Committee will be happy to see those gentlemen to whom it may be convenient to join with them in the proceedings.

There will be a breakfast party at the Royal York Hotel, at the charge of half-a-crown, at from nine to half-past ten o'clock on the morning of the 27th, and again on the following morning.

THOMAS MARTIN, Secretary,
Reigate.

YORKSHIRE BRANCH MEETING.

The Annual Meeting of this Branch will be held at the Museum of the Yorkshire Philosophical Society, York, on Thursday, the 28th instant, at twelve o'clock.

W. D. HUSBAND, Hon. Sec.

York, June 8, 1849.

ERRATA.

In consequence of the severe illness of the Editor, the following errata occurred in the last number of the Journal.

Page 293, in title of Mr. West's paper, for "coma," read "*insomnia*."

Page 300, col. 2, line 9 from the bottom, for "presented" read "*prescribed*." Page 301, col. 1, line 20, for "existed" read "*exists*."

TO CORRESPONDENTS.

Communications have been received from Mr. Smith; Mr. Crompton; Dr. E. Copeman; Mr. Humpage; Dr. Kennion; Dr. Toogood.

In consequence of the lamented death of Dr. Streeten, it is requested that all letters and communications be sent to J. H. Walsh, Esq., Foregate Street, Worcester. Parcels and books for review may be addressed to the care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

ON

RETROVERSION OF THE UTERUS.

By SAMUEL EDWARDS, M.D.,

Formerly House-Surgeon to the Edinburgh Lying-in Hospital, and lately Physician to the Eastern Dispensary, Bath, and to the Bath Ear and Eye Infirmary, &c., &c.

In my last paper published in the *Provincial Medical and Surgical Journal*, I drew attention to the circumstance of my belief that anteversion of the uterus, in a slight degree, was a far more common occurrence than retroversion, at the same time that this latter, (particularly providing pregnancy co-exists,) is much more alarming in its character, and demands more prompt and direct assistance. If we take into consideration the situation of the uterus, balanced as it were in the centre of the pelvis, between the rectum and bladder, and supported merely by the latter, from assuming the oblique position likely to be given to it by the angle of the promontory of the sacrum, we can easily conceive how such should be the case; on the other hand, should the perpendicularity of the womb be altered, (its fundus, too, being heavier than ordinary, from any cause whatever,) from a distension of the bladder, and at the time an exciting cause is brought into action which would exercise a downward action, it can readily be imagined how the uterus, (especially if the rectum be empty, and the uterine ligaments relaxed,) would be forced backwards below the "promontory," and the disease about to be treated of, produced. This, then, is retroversion of the uterus, (the exactly opposite displacement to anteversion,) when the fundus of the womb is posterior, pressing against the rectum, and occupying the concavity of the sacrum, and the cervix anterior, jammed generally against the neck of the bladder, the womb thereby occupying a transverse, instead of a nearly perpendicular position in the pelvis.

The HISTORY of retroversion is peculiar and interesting: without doubt it was an accident well known to the ancients, although their ideas as to its real nature were not altogether very lucid. In the writings of Hippocrates and Philomenus the subject is spoken of. Cælius gives a description of it not inaccurate; also Rod à Castro, Mauriceau, and La Motte. The subject appears subsequently to have been almost lost sight of until Desgranges, in the year 1715, Gregoire, in 1746, and Hunter, (Wm.) in 1754, also Richer, in Germany, drew attention to it, and placed the matter in a clear

and intelligible light. The interesting case of Mr. Walter Wall, and Dr. William Hunter, which, being the first that had been noticed in this country, induced the latter distinguished physician to seize the occasion "to give a public lecture over the body of the patient." It is stated by Dr. Gooch, in his lectures, that in that celebrated case, "on examination after death, the bladder was found distended, the cervix uteri was turned upwards and forwards against the symphysis pubis, and the fundus had fallen downwards and backwards into the hollow of the sacrum, where it was so impacted as to be with difficulty dislodged." Retroversion occurs either suddenly or slowly, according to the nature of the cause giving rise to it; the *extent also of depression* may vary, but to constitute *complete* retroversion, the fundus must be situated below the promontory of the sacrum. The direction of the vagina also becomes altered, so that instead of its direction being upwards and backwards, it will be found upwards and forwards, the posterior wall of that canal being almost superior.

The *causes* are very numerous, but the recital of a great proportion of cases show that it is generally seen in connection with pregnancy, usually whilst the uterus is in the pelvis, and before the eighteenth week, and with a bladder largely distended. An exciting cause coming into action,—*e.g.*, a fall or blow, vomiting or straining, either to void urine or fæces,* or even coughing, may, providing the pelvis is of full or unusual dimensions—the rectum being empty—force the uterus downwards and backwards, tilting it into the hollow of the sacrum. Early pregnancy, therefore, will act as a direct cause, by rendering the fundus heavier than ordinary, and thus more liable to over-balance itself on a slight cause being applied; as likewise moles, tumours affecting the posterior wall of the uterus, acting by their weight, extra-uterine pregnancy, an enlarged ovary,† or tumour‡ in the upper part of the pelvis pressing on the matrix, as in the case of the distended bladder. In the *unimpregnated womb*, retroversion may take place from congestion, such as occurs prior to, or at the menstrual period;§ from hypertrophy, especially of its posterior wall; from chronic metritis or severe ulceration of the cervix, accompanied, as is not infrequently the case, by an enlarged condition of the whole uterus; from scirrhus|| uteri, as also from the condition

* Marcet. Sir A. Cooper.

† Blundell, "Diseases of Women." ‡ Churchill.

‡ Churchill. || Blundell. Pearson "On Cancer."

of the uterus immediately after labour.* Some writers would seem to think that retroversion *only* takes place whilst the uterus is in a state of impregnation, whilst my own experience, with that of some others, proves that such is by no means the case.† That the disease is not by a great deal so dangerous or aggravated in the case of the unimpregnated womb, as otherwise, must be allowed by all, and this will account for the latter receiving so much more attention; for the former, I believe, may and does often take place without being known by the patient or the medical attendant; rest in the recumbent position, and the action of an aperient, (perhaps the employment of the catheter once,) setting matters all to rights, without a suspicion having been excited as to the real nature of the mischief. Within the last three years I have met with three cases of retroversion of the uterus, each of them occurring in the unimpregnated state of the womb. The first was that of a lady suffering from inflammation of the uterus. On the sixth day, when all the acute symptoms had subsided, she suddenly got out of bed, and on so doing her foot slipped from the night steps, and she fell. Within three or four hours she was in pain in the pelvis, and when I first saw her she described to me this pain as being that of fulness and tension of the parts within the pelvis, with an uneasiness and slight difficulty in passing urine; in the evening these symptoms had increased, and I was led to associate the pain and difficulty of urinating with the fall, which made me institute an examination, when I found the womb retroverted. There was no difficulty in immediately pressing upwards and forwards the fundus, which action, by depressing the cervix, relieved the bladder and the sense of distension in the pelvis. Prescribing a dose of castor oil, and some morphia after its action, with a caution for the recumbent posture to be maintained, I left her, and after a few days she perfectly recovered. The two other cases occurred in females having hypertrophy of the uterus from old-standing ulceration of the cervix uteri. In the one, the bladder being full, dancing gave rise to it; in the other, without there being reason to suppose that there was at the time any distension of that viscus, severe vomiting and diarrhoea brought it about. There is every probability that these cases would have been overlooked, had not my attention been previously excited by anteversion in connection with this cause. A few days' rest might have relieved the malady without its true character being known. The matter, however,

is vastly different with the impregnated uterus, every day's delay only increases the evil, until the danger of the symptoms makes the disease to stand out in bold relief, even to the most unobservant of practitioners. I am much inclined to think, with M. Lisfranc, that hypertrophy of the unimpregnated uterus is not an unfrequent cause; and although I am not prepared to assert that retroversion is as much a disease of the unimpregnated as of the impregnated state, yet I am convinced that many cases of the former occur and get well without being recognized, whilst the accident taking place in the latter state, must immediately show itself, and by its dangerous character, excite the gravest attention.

A wide and large pelvis, a too great projection of the promontory of the sacrum,* have been spoken of as *PREDISPOSING CAUSES*; also a prolapse of the posterior wall of the vagina, which of necessity would give a backward obliquity to the womb.

The *SYMPTOMS* will vary a good deal as to whether the displacement is gradual or sudden. In the former case but little difference in the patient's feelings may take place, until such time as sufficient pressure is exerted upon the neck of the bladder to produce a difficulty in voiding the urine. In the latter, however, pain of an acute character will immediately affect the patient in the pelvis, a "bearing-down" sensation, with dragging about the groins from stretching of the broad ligaments. The "bearing-down" has been known to be so violent, that the case has been mistaken for one of miscarriage; the most distressing symptom, however, and that which troubles the patient most, is a difficulty, either more or less complete, of passing the urine. The retention is sometimes, but not *usually complete*; instead, a constant dribbling takes place, but at the same time the urine collects in a large quantity in the bladder; coupled with this there are very frequent and urgent involuntary bearing-down efforts to empty the viscus, which are seldom or never productive of ought but increased uneasiness; and as the secretion from the kidneys is not stopped, if the catheter be not employed in twenty-four or thirty-six hours, very severe pain will be occasioned. If the retention remains some time, the bladder may be felt above the pubis; and it is well to make a remark here, that in all cases of dysuria, especially occurring in early pregnancy, it is advisable to make an immediate examination, per vaginam, as the rectification of position is always rendered more difficult by delay. The next symptom of grave im-

* Churchill.

† My friend, Mr. Ness, of Yorkshire, was kind enough to send me the particulars of a case of retroversio uteri, *post partum*, of which the following is a copy:—"Mary H., aged 24, married, was taken in labour of her first child May 19th, 1846; the pelvis being very capacious, the labour did not continue more than half an hour, and the child was expelled before my arrival. She went on well until the third day, when I was hastily summoned, and found her complaining of violent bearing-down pains, and frequent inclination to make water, without the power of expelling it. These pains came on after having been up and dressed for some hours. On examination per vaginam, I found a large soft tumour occupying the perinaeum, projecting towards and filling up the vagina. Not having heard or read of any case of retroversion after delivery, I supposed at first that it

might be perineal hernia, (a fatal case of which I had once seen after delivery,) but finding on further examination that the uterus was not *in situ*, and that I could not reach the "os" with my fingers, I concluded that it was retroversio uteri, and succeeded in reducing the tumour by pushing it upwards and backwards with my hand in the vagina. Supposing, if my patient kept still and quiet in bed, the uterus would remain in its natural position. I did not then introduce any plug into the vagina, and in a few hours afterwards I was again summoned, and found that the tumour had returned on attempting to make water. I again reduced it, and this time filled up the vagina with soft rag, which I extracted at the end of two days. No return of the protrusion took place afterwards, but she was kept in bed for a considerable time as a measure of precaution."—J. Nass,

* Jourdan,

portance, is pressure of the fundus against the rectum, thereby producing severe constipation, or even a difficulty in going to stool at all. Obstruction generally takes place earlier in the rectum than in the bladder, partly from the fact of the more solid character of its contents, as also that the fundus uteri produces more pressure than the neck of that organ. When once this obstruction begins, it aggravates the displacement, from the pressure of the loaded bowels forcing down the "fundus," and as the bladder becomes more distended, it stretches, and draws up the "cervix" and vagina, of course thereby depressing still more the fundus. Nausea and vomiting are very frequent symptoms, and this, coupled with the pains, which are sometimes most acute, produce their effect upon the constitution; the patient becomes irritable, hot, and feverish, the pulse quick; thirst and a loaded tongue succeed; and cases have occurred where stercoraceous vomiting took place, and the distension of the bladder not having been relieved, its walls have burst, and, discharging its contents into the cavity of the abdomen, it has occasioned death by peritonitis.

Dr. Gooch* states that retroversion of the impregnated uterus may terminate "fatally by one of three modes, either by irritation, inflammation, or by sloughing of the bladder." Examination by the vagina will immediately convince us of an altered position in this canal, its direction will be almost reversed; instead of running backwards and a little upwards, it will be found *upwards* and *forwards*, its posterior wall will be slack and in rugæ, whilst the anterior will be upon the stretch considerably, so much so that the orifice of the urethra has been known by Richer to be drawn up above the pubic bones. At this point the vagina itself will appear flattened. Behind will be found a hard and round tumour, occupying the cavity of the sacrum, and on examination by the rectum it will be discovered lying between those two organs, preventing the further progress of the finger. This tumour is continued across to the pubic bones, against which it is applied, and if the distension of the bladder is not great, the os uteri may be reached, with some little difficulty, however; if otherwise, the finger cannot be carried further than the lower (or posterior) surface of the womb. The size of the tumour, of course, must depend upon the period of gestation, if *impregnated*, to which state the above symptoms alone pertain. The symptoms of the displacement in the *unimpregnated* womb are much slighter, and have been previously sufficiently dwelt upon.

The **DIAGNOSIS** of retroversion cannot be a matter of very great difficulty, and as the two most prominent symptoms are the difficulty of micturition and defæcation, this should lead us to an immediate examination, when the mechanical cause of the symptoms must be at once apparent in the altered situation of parts, the cervix of the uterus being directed forwards and upwards, and the fundus below and behind, between the vagina and rectum. Dr. Dewees has mentioned that the accident may be mistaken for prolapsus, but although to a certain extent the same general class of

symptoms may be excited, yet the information gained by an internal examination, is so positive that it is scarcely possible such could be confounded together. I cannot help thinking that Dr. Dewees, in stating that the one may be easily mistaken for the other, must have referred to retroversion with the neck of the womb bent at right angles, or what is called retroflexion, for in this case the os uteri will be pointing downwards, although it will not be so low as in the case of prolapse; and by tracing across the pelvis the continuity of the cervix and tumour (fundus) behind, the case will be most evident. From *anteversion* it must alone be detected by the "toucher," by which we shall find the opposite state of matters to exist, viz., the fundus, anterior, and the os uteri directed backwards. The retention of urine is generally more complete in *retroversion*. From *pelvic tumours* the diagnosis is more beset with difficulty; but if we can succeed in reaching the os uteri, notice its connection with the vagina, and thence tracing the uterus across the pelvis, the diagnosis is accomplished. These tumours do not often occasion retention of urine until they are too large to be mistaken for the retroverted womb. An extra-uterine ovum, or ovarian tumour might occupy the same situation, but the difference in their physical properties would discover them, the latter being softer and more elastic in its feel, besides for the most part being of slow growth, and little interfering with the bladder and rectum till a much later period. In the case also of the ovarian tumour, it is possible that the uterus would be pushed more to one side or the other. The distension of the bladder has been mistaken for ascites, and the operation of tapping actually proposed, but the suddenness generally of the swelling, the particular situation, its ovoid defined shape, above all the introduction of the catheter, ought entirely to prevent such an error. There is another circumstance which has been mistaken for retroversion, although it is a rare one, I refer to the impregnated womb not making its ascent as usual from out of the pelvis, but going on increasing until it produces pressure both upon the rectum and bladder, and occasioning all those pelvic pains usually found in uterine disorders; examination, however, can scarcely fail to detect the difference, as we here should find a firm tumour *blocking* up the pelvis, and the os uteri pointing downwards and very low. On the rectum and bladder being emptied as completely as possible, the uterus may be pushed up above the brim of the pelvis, and a few days' rest, by the growth of the uterus, will prevent a repetition of the evil. It may, however, be mentioned, that great care should be taken that the bladder, especially, be emptied before any force is exerted to raise the womb.

In the **TREATMENT** of retroversion of the uterus our first attention must be directed to the relief of the bladder, which, after a very short time, is found distended, and although in the majority of cases the retention of urine is not complete, yet the slight dribbling which takes place effects nothing towards the relief of the patient. Our thoughts must next be at once turned towards the important subject of endeavouring to restore the womb to its *normal position*.

* Lectures on Midwifery, p. 119.

This should never be attempted without the use of the catheter, and here commonly a difficulty is met with in its introduction, from the altered course of the urethra, and from its increased length, so that the instrument in common use will not enter the bladder. We must consequently have recourse to a male elastic catheter, which is the best adapted for the circumstances of the case. The function of the rectum being also interfered with, we must endeavour to clear it by means of an aperient clyster, and room being afforded anteriorly as posteriorly, cases are on record where the womb, even in the impregnated state, has righted itself. In Dr. Hunter's remarks upon Mr. Wall's case, he says—"the urine was completely drawn off by the catheter: then a sufficiently stimulating clyster was thrown up; and after the bowels were well emptied, it was always found easy to replace the uterus. In one instance the uterus of itself recovered its natural situation, immediately after the above mentioned evacuations had taken place. In another case there were several relapses, before the uterus grew so large that it could no longer fall back."* Such cases must, however, be very rare, if we take into consideration the impediments which present themselves to reposition, and more especially if the womb has been impregnated two or three months, and the displacement complete, and of some days duration. Some authors, and especially Burns, advocate the principle of leaving the reposition to nature, taking care that the bladder and rectum are constantly kept emptied. He states, that, "by this plan, we generally find that the uterus resumes its proper situation in the course of a short time, perhaps in forty-eight hours; and the retroversion is seldom continued for more than a week, unless the displacement has been very complete." In taking into consideration the propriety of endeavouring to replace the womb, we should keep constantly in view the term of gestation, and whether it be a first pregnancy or otherwise, (for in the former case the uterus is never so greatly developed at the same period as in the latter,) also the severity of the symptoms, and length of their existence. There can be no doubt that delay in rectifying the position, and placing reliance exclusively upon drawing off the urine, is frequently productive of grave consequences, and has been in some cases on record, of death itself. Blundell† recommends somewhat strongly a plan originally adopted by Denman:—"This consists in keeping the bladder thoroughly emptied, letting the patient drink but little, causing her to perspire as much as may be, and introducing the catheter some two or three times a day; the bladder being kept empty, the woman is placed with the pelvis inverted, for which purpose she ought to take the position on the knees and elbows. The longer time she passes in this posture the better; it may be necessary to use it for hours together; she is not to give way merely on account of the fatigue, but to continue it as long as the replacement may require. Adopting this plan, the bladder being empty, the womb will sometimes return to its natural position; may be

immediately, may be in an hour or hours, but I think I may venture to add that it pretty certainly returns at last. To this mode of treating I am exceedingly partial, because it requires nothing more than the introduction of the catheter, and the abstraction of the urine; there is no introduction of the hand into the vagina, no entrance of the fingers into the rectum, no force, no contusion, and no lacerations." Retroversion, however, in connection with pregnancy, must always be looked upon as a grave accident, and *should never be left to nature* if the symptoms are at all severe, for the efforts of nature are more likely to confirm than remedy the evil. I am authorized to make this remark from numerous cases on record, and I cannot help thinking that as much blame should be attached to the practitioner who allows the retroversion to continue unassisted, as would assuredly, were an inverted uterus to be permitted to exist without attempt at reduction. The case then, being without doubt ascertained to be retroversion, we should withdraw the urine, and exhibit an enema. If there is much pain about the pelvis, and there appears reason to believe that inflammation of the womb, bladder, or neighbouring parts exist, it will be proper to bleed, generally or topically, according to the circumstances of the patient; foment the pelvis, or use the hip-bath (warm) before attempting reposition; usually it will be found unnecessary. The reduction should then be attempted in this way:—the patient lying in the usual obstetric position, or, as some think desirable, on the knees and elbows, one or two fingers of the left hand should be introduced into the rectum, for the purpose of making pressure upon the fundus, whilst two fingers of the right hand in the vagina should attempt to hook down the cervix, which, by the way, is not easy of accomplishing; the pressure made upon the fundus through the rectum should be directed so as to avoid the promontory of the sacrum, for here the principal obstacle exists; for this purpose, therefore, the direction of the pressure should be *forward* and then *upwards*. Should the case be of that aggravated character where the womb is so jammed into the pelvis, that a difficulty is experienced in moving it, our efforts should not be relaxed, and the reduction put down as impracticable. The danger of leaving the case to nature is so great, that all *prudent* efforts should be used to overcome it, and some have even recommended introducing the whole hand into the rectum for this purpose. I can scarcely conceive such a procedure to be necessary, still the danger of delay is so great, that I look upon the risk to be incurred from bruising and stretching of the parts inconsiderable, when compared with the dangers it is intended to overcome. To obviate the necessity of introducing the hand, Mr. Halpin, in the *Dublin Journal*, some years since, recommended the employment of a bladder in the vagina, by which he would "*be able to inflate the pelvis, and thus raise its contents into the abdomen*." We acted on this suggestion." I attached a small recent bladder to the tube of a stomach pump with an air-tight piston, and having immersed it for a few moments in warm water, to bring it to the heat of the body, I introduced it empty into the vagina between the fundus of the

* Med. Obs. and Enq., vol. iv., p. 408.

† On Diseases of Women.

uterus and the rectum." Air is then gently to be thrown into it, and it was found to prove, in one case, very successful. It is certainly a useful suggestion, and one which it would be well to put in practice, before having recourse to harsher measures.

After the uterus had been replaced, there is generally a good deal of febrile irritability, with a tendency to inflammation in the vagina and neighbouring parts; in a general way little is necessary beyond the antiphlogistic regimen with an opiate and rest. The patient should be required to retain the recumbent posture exclusively for two or three weeks subsequently, and if any tendency exists to a repetition of the evil, Dr. Blundell's advice would be serviceable, viz., to cause the patient several times a-day to keep on her knees and elbows, and also not to allow a collection of urine to take place, but pass it as often as *practicable*. As soon as the womb (in the pregnant state) rises above the pubis all risk of a repetition is over, and caution as to posture will be unnecessary; but in the case of the unimpregnated condition it is different, more caution will be required, and she should maintain her couch much longer. In this latter case there is seldom any occasion for manual interference, and when required, the rectification is simple. Attention should here be directed to the peculiar condition of the uterus and the remedies suitable for its diseased condition immediately put in force, whether it be mere congestion, ulceration and hypertrophy, or tumours, &c. The above remarks have been made, presupposing the reposition to be possible, however much difficulty might have been experienced in its reduction; but cases are on record where this happy termination is seemingly not to be gained, without encountering difficulties of an alarming nature. The female is pregnant, three, or it may be four, months; the womb is retroverted, and the bladder full, containing perhaps many quarts of urine. An attempt is made to introduce the catheter, but our efforts are altogether unavailing. What then is to be done? An attempt should first be made to empty the rectum, then, by pressing back the uterus, to endeavour to pass the gum-elastic catheter. If this should not succeed, puncture of the bladder is our only resource, and has been adopted with success in the case of Cheston; for my own part I can scarcely think such a procedure is ever necessary. In the severest cases I have met with, (with the exception of Cheston's,) when the reposition was most difficult, an elastic catheter could be *insinuated* into the bladder. But, supposing the bladder to be emptied, we may be foiled in all our efforts to replace the retroversion, on account of the large size the womb has acquired, and the length of time the displacement has continued; two courses will then be left open to us, viz., the case can be left to nature, paying due attention to the bladder and rectum, and waiting until the womb has lost, by parturition, its contents. The objections to this plan appear to me to be so great, that I am surprised at its receiving the sanction of any name of the slightest weight, for it appears to be a breach of professional duty to allow almost certain death to stare our patient in the face, without an attempt being made to relieve her. Or, secondly, in the case of the pregnant womb, a bougie

may be introduced through the os uteri, if possible, in order to induce premature labour, and thus produce a diminution in the size of the womb; or, if this cannot be performed, Hunter recommended that the uterus should be tapped through the rectum or vagina. The latter would seem preferable. He did not live long enough to see his suggestion carried out, but it has since been put in practice, and with success. It has also been recommended by Capuron, Nanche, and Blundell. It is true that the operation necessarily supposes the destruction of the fœtus, but if the mischief be so imperative as to demand the operation of tapping the uterus, in all probability the death of the fœtus would have taken place prior to that time; independently of which, the axiom in British midwifery would hold good here, that the mother should not be sacrificed for the sake of the child. Finally, in these cases of such danger and difficulty, two other plans have been suggested, but so far as I am aware, *only* suggested, viz., (that by Callisen,) to open the abdomen, and immediately seize the uterus, and replace it; the other, to divide the symphysis pubis, with the intention of making more room for allowing of reposition of the womb. Both are frightful operations, the necessity of which I cannot conceive. They have been spoken of in commendatory terms by Callisen, Purcell, Gardien, and Cruikshank.

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ON THE STRUCTURE OF THE SYNOVIAL MEMBRANE COVERING THE SURFACE OF ARTICULAR CARTILAGES.

By J. G. SWAYNE, Esq., M.R.C.S., Clifton, Bristol.

Since the time of Hunter and Bichat it has been the generally-received opinion, that synovial, like serous membranes, form shut sacs, and that they are directly reflected from the ligaments over the articular surfaces of the bones which enter into the composition of a joint. This anatomical fact has not been doubted until lately, when Velpeau and some other French authors, in consequence of the difficulty of demonstrating the synovial membrane upon the surfaces of the articular cartilages, have come to the conclusion that it does not exist in those situations. Blandin has even asserted that the synovial membrane passes between the bones and their articular cartilages; whilst Blainville holds a kind of mixed opinion, and believes that when the synovial membrane arrives at the border of the cartilage it splits into two laminæ, one of which is continued over its superficial, and the other over its deep surface. Lastly, M. Bichat, who has written a clever thesis on white swellings and diseases of joints, asserts that the synovial membrane advances for a very short distance, perhaps a quarter or one-eighth of an inch upon the surface of the articular cartilage, and then ceases; and he is of opinion that the epithelial layer which Henlé has described as covering the cartilage, is nothing more than an appearance which the superficial cells of the

cartilage assume, in consequence of their being flattened by the pressure upon the articular surfaces. Still more recently, Dr. Joseph Leidy has published in the *American Journal of the Medical Sciences*, for April, 1849, some researches into the structure of articular cartilage, of which a digest is given in the *London Journal of Medicine*, for June, 1849. With respect to the synovial membrane, "Dr. Leidy has always failed to detect this in the adult, on the free surface of the cartilage, or even the appearance of a basement membrane. It appears to terminate at the circumference of the articular cartilage, very little beyond the vascular circle."—*London Journal of Medicine*, VI. Page 562.

I shall endeavour in this paper, to show that the opinion which is held by English anatomists as well as by most foreign ones, including Valentin and Henlé is correct, and that the synovial membrane can be traced as a continuous layer over the entire surface of the articular cartilage. The French theory seems to have arisen from the difficulty and almost impossibility which there is in isolating the synovial membrane, so as to show it as a distinct structure. This difficulty is alluded to in the following short description of this membrane by Todd and Bowman:—"A pavement of nucleated epithelial particles has been described by Henlé to exist on the free surface of articular cartilage. In the fœtus this may be readily seen; but in the adult we have often failed to detect it, even in perfectly fresh specimens and notwithstanding great care. An irregularity of surface often exists and seems to shew that this covering ceases, when the part becomes subject to friction and pressure. Cells, too, are often seen close to this surface, and even partly projecting from it—appearances indicative of attrition."

I had myself been unable, after several trials, to dissect off the synovial membrane from the articular cartilage as far as its centre, until a short time since, when I was fortunate enough to meet with a subject in whom the membrane was remarkably thick and distinct. The subject was a lad, aged 17, who was dissected at the medical school, and although the joints were not diseased, yet the synovial membrane appeared remarkably soft and thick, and of a rosy colour. It was not difficult, by beginning at the circumference of the head of the femur, to detach a thin strip of synovial membrane even as far as its centre.

Such a strip when examined under the microscope, exhibits but little evidence of structure, its surface is covered here and there with faint lines and creasings, which in some places exhibit a slight appearance of pavement epithelium, but this is by no means distinct. The membrane is so thin and adheres so closely to the surface of the cartilage, that it is very difficult to detach it without either tearing it, or bringing away a number of adherent cartilage cells. However, in many places it will be found to be quite free from these. On making a vertical section of the articular cartilage from the head of the femur in the same subject, the synovial membrane appeared under the microscope as a thin but distinct layer, presenting very evident characters of structure. It can then be seen to be distinctly made up of flattened cells, imbricated one upon the other, their free edges pointing obliquely

upwards; some of these, apparently in consequence of friction are partially or almost entirely detached. In an oblique section of the same cartilage these appearances are not seen so clearly, but a distinct line of demarcation can be observed between the synovial membrane and the cartilage it rests upon. In the specimens which I have from the fœtus and the infant at birth, the synovial membranes can be shown, but not so distinctly as in former sections; the membrane here appears much smoother on its free surface, and the cells seem to be placed much more flatly upon the cartilage. It is rare also to meet with detached cells. This evidently results from the little amount of friction which the membrane has undergone. Under all circumstances, however, the synovial membrane, when it covers articular cartilage is an exceedingly thin and compact layer, adhering very firmly to the subjacent cartilage, and in most cases it is impossible to detach it as a distinct membrane for more than a quarter or half an inch, at farthest, beyond the edge of the cartilage, and it is chiefly from this circumstance, that the French anatomists above mentioned, believe that a breach in its continuity here takes place; a view, however, which is not sanctioned by what we know of the pathology of joints in general.

CASE OF INFANTILE DIABETES.

By JOSHUA PARSONS, Esq., M.R.C.S., Beckington, Somersetshire.

On the 23rd of February, 1848, I was requested to see J. P., aged eleven months, the child of respectable parents, who was represented to me to be near death from decline. On examination I found him in the following condition:—The skin dry, shrivelled, and of uniform purplish hue, below the natural temperature, the extremities especially being very cold; the emaciation was extreme in the trunk and extremities, but the face was puffed, and, especially around the eyes, œdematous; the debility seemed great, and every movement communicated to the infant by the nurse appeared to give great uneasiness, which was expressed by a low whining cry, at all other times the child lay either in a semi-comatose state, or was continually moaning; the pulse was 96, extremely feeble and thready; the tongue bore an exact resemblance to the surface of raw beef, being dark, red, and glossy, and so chopped as to mark it out into numerous little square compartments. The similar appearance of this tongue to that of a patient at that time under my care with ordinary diabetes, immediately led me to inquire into the state of the urinary function. I could gain no accurate information respecting the quantity of urine, but the attendants supposed, from the number of napkins required, that it must be greater than usual, and they spontaneously remarked that it had a very strange smell, which was compared by one to mead, and by another to spoiled honey. I procured about an ounce for examination, and found it to possess the following properties:—The colour nearly as dark as ordinary brandy; smell sickly and sweet; consistence

thick and viscid; reaction acid, specific gravity 1.044, and yielding on evaporation nearly half its weight of imperfectly dried solid matter; the alvine secretions were black and scybalous. On inquiry, I found that the child was weaned at two months, after which it became very fretful and restless. To prevent the inconvenience from this source, it was occasionally treated, with what is called in this neighbourhood, "a sugar-teat," *i.e.*, a pinch of moist sugar tied up in rag, and placed in its mouth. This expedient answered so admirably, that the same process was repeated with increasing frequency, until, for some time before my visit, he had consumed in this way from three-quarters to a whole pound of sugar daily, taking no other nutriment, except on rare occasions a draught of milk, sweetened with sugar. Cold water would have been swallowed with avidity at any time, but from the fear of this liquid, so prevalent among the ignorant, was rarely supplied. By way of remedy I suggested, without, I must confess, a hope of success, for the infant seemed to be dying, an immediate abandonment of "sugar-teats," the child to be nourished with milk-and-water, alternating with weak animal broths, the thirst to be fully gratified with cold water, and the following medicines given:—R. Potass. Nitrat., gr. xij.; Acid. Nitric., m. iv.; Infus. Aurant., dr. iij.; Aq. Distill., dr. ix. M. Coch., min. j., quartis horis adhibend.—R. Hyd. cum Creta, gr. ij.; Pulv. Aromat., gr. ij. Fiat Pulv., hora somni sumendus.

24th. On my next visit, about eighteen hours after, the child appeared much the same, had passed a much quieter night than was expected, and although the directions respecting medicine, food, and drink, had been scrupulously attended to, the quantity of urine passed was greatly lessened, and none could be procured for inspection. Ordered to persevere, though still with very little expectation of permanent good.

26th. Unavoidable circumstances prevented my seeing the patient on the 25th, but when I called the next morning I could scarcely think I was looking upon the same child. The face was now thin and pale, wearing an easy though faint smile; the limbs warm, and the general temperature and colour of the body natural; the tongue was paler, the thirst less, and the appetite for wholesome nutriment increasing. The bowels had been considerably purged, five or six motions having been passed, which were first black and semi-solid, but latterly fluid and green; the quantity of urine had again increased, but it had now nearly lost the diabetic character; it was pale, acid, of specific gravity 1.022, and not appreciably sweet, and I could detect no saccharine properties in the solid residuum after evaporation. I can add no more. From this time the infant rapidly improved, and at the end of a month was a fat healthy child, and has ever since remained strong and well. It was my intention to have transmitted a specimen of the urine for strict chemical investigation, but from the circumstances detailed above, I never had an opportunity of procuring another specimen after that which served for my first rough examination; and from the unexpectedly rapid recovery of the little patient, the opportunity was lost for several observations, which have since suggested themselves.

CASES OF POISONING BY THE ACETATE OF LEAD, WITH REMARKS.

By WILLIAM NORRIS, M.D., Stourbridge.

Acute and chronic diseases of the abdominal viscera form a large class of the most violent and dangerous character that come under the treatment of the medical practitioner, and without early and decisive measures, they too often terminate fatally; and any opportunity that may occur to throw the least additional light on their pathology or treatment, should be zealously cultivated. As an awful occurrence has taken place in the towns of Stourbridge and Kidderminster, and the neighbouring villages, from the mistake of a miller's servant, who mixed about thirty pounds of acetate of lead, in the place of alum, with sixty or eighty sacks of flour, nearly a thousand persons having suffered from its poisonous effects, I shall make a feeble attempt to place before the profession anything new or striking, with the hope that it might induce eminent toxicologists to investigate this alarming disease more minutely. The sufferings of the patients being unusually protracted and severe, in consequence of eating the poisoned bread some weeks after the violent symptoms first commenced, the strongest and most robust men, (from long suffering, and from the frequent occurrence of violent paroxysms,) have been reduced to the most emaciated and feeble state.

The persons who ate the bread, after a few weeks complained of a peculiar taste; some compared it to soda, others to rusty needles or copper. The tongue was covered with a darkish cream-coloured mucus, and was soft and flabby; the gums were swollen, with a blue line on the margin, and in many cases the blue tinge extended nearly over the gums, and occasionally on the inner side of the lower lip, and in a faint degree over the mucous membrane of the mouth and towards the fauces; the tonsils were in some cases enlarged, producing soreness of the throat, and in other cases there was salivation, a clear fluid flowing from the mouth many days after convalescence. These symptoms were accompanied by loss of appetite, nausea, vomiting, flatulency, and obstinate constipation, with a sense of constriction in the throat and epigastrium, and a violent spasmodic pain and twisting around the umbilicus, which was retracted; the pain was sometimes increased by pressure, occasionally extending over the abdomen, and when the paroxysms were violent, the muscles of the abdomen were contracted spasmodically, and a most frequent symptom was pain in the loins, about the situation of the lumbar fascia, and in the deltoid muscles. The patients were chilly, with great languor and lassitude; the cutaneous secretion was diminished; the intellect was clear, but there was generally depression of the nervous, sanguineous, and muscular systems; the pulse was low and feeble; the features were sallow, and shrunk; and the muscles felt soft and flabby; the fluid vomited was often mixed with bile, and occasionally coffee-ground secretion; the feces were dark, and highly offensive, with scybala; the secretion from the kidneys was scanty, and of a dark red colour, almost like porter.

Treatment.—The bowels were in general so obstinately constive, that large and frequently repeated doses of the strongest cathartics were often necessary. Sometimes I began with a large dose of calomel, followed by sulphate of magnesia or castor oil; when these did not produce sufficient effect, croton oil, and voluminous enemata, were used with manifest advantage. Croton oil frictions were useful when vomiting was excessive. To allay the sickness, hydrocyanic acid, or a few doses of calomel and opium. By the omission of the daily purgative, the symptoms would, in many cases return. The patients were directed to take light nutritious food and milk during convalescence. Some cases were so slight, (although the gums were blue,) that the patients would not take medicine.

In violent cases, when other remedies had failed, the warm bath relaxed the spasms very speedily. Opiate frictions, and bran poultices, were useful in milder cases. The soothing effects of the warm bath, in some instances, were quite astonishing, and in violent cases it should never be omitted, for it not only relieves the abdominal pain, but allays the spasms and irritation in other muscles of the body. When there was tenderness in the abdomen on pressure, leeches were beneficial; and in one case venesection was absolutely necessary.

A young woman, Phœbe Welch, aged 22, who had suffered severely from peritonitis three years before, had been ill from the effects of lead more than a week, when the pain in the abdomen much increased, with great tenderness on pressure, feverish excitement, and rapid pulse. Venesection and leeches were used, and the sufferings were mitigated; the symptoms returned with increased violence, and bleeding and other antiphlogistic remedies were repeated. The blood was buffed and cupped. As the inflammatory symptoms subsided, she became almost maniacally hysterical on several successive nights, and yet she recovered many weeks sooner than any of the family, so that I am inclined to believe, in strong subjects venesection may be useful.

In very severe cases there was great exhaustion, and a slight leaden hue in the countenance; then stimulants became absolutely necessary.

In one of the last numbers of the *Provincial Journal*, I found iodide of potass, recommended in small doses, as a remedy for the poisonous effects of lead and mercury, by forming a soluble salt, which is readily eliminated. The experiments were performed by M. Natalis Guillott, read before the Académie des Sciences, Paris. I have tried this remedy in several cases; and certainly, gums that had been blue for months, in a few days changed to a more natural appearance, and no symptoms of severity have since occurred; in fact the patients appear now quite convalescent.

GENERAL REMARKS.—It was melancholy to observe ten or twelve patients, in poor families, all suffering at the same time, and scarcely able to assist each other, without funds and without necessities.

The poison of lead appears to exert its deleterious effects mostly on the muscular system. One of the most frequent symptoms was an acute or chronic pain

in the muscles of the loins, and perhaps also in the fascia lumborum; and in many cases the larger muscles of the body were affected with pain. Probably the abdominal pain is occasioned by the spasmodic constriction of the muscular fibres of the larger bowels, thus diminishing their contractility of tissue; and this may, in part, be the cause of the constipation, though in some cases the pain may be confined to the abdominal muscles.

In a youth, 18 years of age, with blue gums, the pains were confined to the muscles of the arms and legs, and he suffered most severely from violent contractions in all the extremities, without pain of abdomen or loins.

In this neighbourhood we have numerous glass houses, and many hundreds of men are constantly employed in the fumes of lead, and we know them by a sallow, thin, unhealthy aspect, with soft and flabby muscles. The relapses in some constitutions were very frequent and very severe, sometimes after several weeks had elapsed, and patients thought themselves well.

Mr. Segar, aged 47, an irritable man, of nervous temperament, had suffered from several severe paroxysms, the pains began gradually to return a month after the onset of the disease, and increased like the pains of labour, every ten minutes or a quarter of an hour; there was great difficulty in relieving his bowels, (which, in many instances, were locked up for a week or nine days); when the bowels were cleared, large and repeated doses of laudanum only mitigated his sufferings, till at length, at the end of thirty-six hours, the pains were returning very frequently, and became more and more violent, in the abdomen, back, and various parts of the body, somewhat similar to the last pains of childbirth, with the pulse excited, and the face flushed; he was almost maniacal, biting and tearing anything before him. An immersion in the hot bath acted like a charm; in a few minutes the pain subsided in the bath. He went into a profuse perspiration, and slept all night. At the end of two months the case terminated with severe diarrhoea.

Sarah Welch, aged 20, a strong robust woman, had more than a dozen severe paroxysms for six weeks, and was confined to her bed, and at the end of seven weeks had an attack more severe than any that preceded. The pains intermitted, being sometimes moderate, then succeeded by agonizing torture. The warm bath gave great relief in this case, but there was a slight return from irritating scybala; and so long as scybala remain, there is no safety. In these cases the lower bowels were often freely opened, still much irritating matter remained in the upper bowels, and perfect ease from the paroxysm cannot be ensured till all irritating secretions are removed. All ages suffered, even children at the breast; also rabbits and birds. Some persons were affected very slightly, having only a slight griping pain in the bowels, with muscular pains, dyspeptic symptoms, and a half-jaundiced appearance. Many of these chronic cases went on two or three months without any violent paroxysm.

I attended a painter, who had suffered severely from paroxysms nearly a week, when some scybala came away

of very curious appearance, of oval shape, the size of marbles; they were fatty substances, rather hardened, like suet, with a green tinge. The patient told me that for weeks he had been eating fat mutton, and had been very much employed mixing green paint. The symptoms now subsided; he had no return.

The extensive blueness in the gums was a very characteristic feature in this disease. I saw 120 cases, and I witnessed this peculiar change in most of them. There were very few exceptions. Those patients with the gums most tinged did not always suffer the most acute symptoms, but they continued more or less indisposed till the gums assumed their healthy aspect; but I do not consider any patients safe, if they have suffered from severe paroxysms, while this unnatural appearance remains, for many have followed their avocations for weeks, and have then been doomed to fresh, and perhaps more severe attacks. I ate the poisoned bread myself, but the symptoms went off very lightly. In convalescence I always enjoined strict attention to the bowels, very warm clothing, and a milk and light diet.

No case of paralysis of the arms has yet occurred. Some violent cases were followed by mild typhoid symptoms, others by slight jaundice, anasarca, and diarrhoea. One diseased old woman, subject to pyrosis, I think must have died from exhausting diarrhoea if she had not been well supplied with laudanum, brandy, and other stimulants.

Some are easily affected with small doses of lead, whilst others I have seen since the last few months have resisted its effects most wonderfully. I knew a man take half an ounce of *Liquor Plumbi* in mistake, without any ill effects.

I have endeavoured to give a faithful narrative of the cases, taken from the bed-sides of the patients, and it is gratifying to be able to state, that we have not lost a single patient, though all will admit that they never saw before such violent and long-continued cases. This differs from Andral's computation, who states that one death generally occurs in every hundred. This success is very satisfactory to the medical men, who attended the patients most diligently and zealously, and I feel much obliged to them for frequent discussions on their cases during treatment.

The miller was also a paper maker, and used acetate of lead for bleaching his paper.

Stourbridge, May 25, 1849.

FIBROUS TUMOUR OF THE UTERUS, &c.: CASE AND REMARKS.

By EDWARD BALLARD, M.D., East Retford,

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The following recital can scarcely be denominated a *clinical* illustration, but as it illustrates some interesting points in connection with the progress of a very common disease, I do not hesitate to submit it to the readers of the Journal.

CASE.

Abdominal Tumour; Fluctuation, &c.; Fibrous Tumour of Uterus; Perforation and Inflammation of the Peritoneum, &c.

About six years ago I was requested by Mr. Garland, of Islington, to examine the body of a patient of his, an old lady, who had for many years been the subject of an abdominal tumour. The only history of the case I could obtain, either then or subsequently, was that for a short time before her death the abdomen had been increasing unusually in bulk, and, without making any complaints which led him to suspect an inflammatory disease in that cavity, she had gradually sunk.

The body generally was stout; the abdomen was very much enlarged; and there was a very distinct fluctuation perceptible, with dullness on percussion everywhere but at the epigastrium; no solid tumour could be felt; there was much œdematous thickening of the abdominal walls in depending parts; and the legs were also swollen.

The abdomen was tapped, and about four gallons of an opaque, reddish-brown, turbid liquid was drawn off, specific gravity 1.018; it appeared to contain fine floating particles. As the cavity of the peritoneum became emptied, the abdominal tumour stated to have been present during life became perceptible to the hand, large and circumscribed, occupying a considerable part of the abdomen, hard over a great part of its extent, but in some parts yielding to pressure; it was capable of being lifted by insinuating the hands behind it. On opening the abdomen the tumour was found to be connected with the uterus, occupying the inlet of the pelvis, and projecting ten or twelve inches above it, and more towards the right side than the left; it had evidently formed in the fundus of the organ, since the broad ligaments and ovaries were in their natural position, the Fallopian tubes not laid along the sides of the uterus as when the entire body is enlarged. There were no morbid adhesions. The size of it was that of a large adult's head; the peritoneum which covered it was rough, corrugated, dense, and thickened, and attached to it were loose shreds of brownish-red lymph, especially on the anterior and superior parts. The right side of the tumour was hard, but the left presented a more globular protuberance, containing fluid. At the upper and lateral part of this softer portion was an opening, about the size of a large pea, through which a liquid might be pressed, similar to that in the general cavity of the peritoneum. The weight of the entire tumour was between four and five pounds; its solid portion consisted of fibrous matter. The cavity was about the size of a child's head; its contents were a liquid, such as was discovered in the peritoneum; and a large quantity of a reddish brown shreddy lymph attached to the wall, and lying loose in the interior. The wall measured three lines at its thinnest part; it was lined by a softer substance, of a red colour, and capable of removal by scraping with the scalpel, varying however in density and in thickness from a line to half an inch. This cavity was separated from the true uterine cavity by a tissue, of about an inch or more in thickness. The cervix uteri had disappeared, the vagina

terminating above in the opening into the cavity of the uterus, which was rounded, having completely lost the usual appearance of the os tincae. The uterine cavity presented the appearance of a long narrow canal, stretching about three inches upwards, backwards, and towards the right side, lying thus behind and beneath the morbid cavity above described. Its lining membrane was reddened, and it contained a reddish, bloody, mucus.

The peritoneal covering of the anterior wall was mostly pale, and covered with a smooth even coating of lymph, well and firmly organized upon it, leaving here and there small spots of serous membrane uncoated. Opposite the tumour, however, the peritoneum was of a darker hue, and covered with the same sort of shreddy lymph as the tumour itself. The small intestines were glued together by lymph, but little organized; in some parts there were large bands of soft adhesions. Recent clear lymph was also perceptible in points, and smooth layers over the whole surface of the intestines. The peritoneal coat of the stomach and intestinal canal was of a dark purple hue. The liver was adherent to the diaphragm, and its upper surface roughened by the shreddy lymph before noticed. The peritoneal coat of the spleen was cartilaginous in patches, these sometimes attaining the thickness of a line. The diaphragm rose higher into the chest than usual. The lungs were pushed upwards and backwards, and occupied less than their usual space. Heart enlarged. Wall of left ventricle one inch and a quarter thick. Kidneys large, and coarse in structure.

REMARKS.—1. Fibrous tumours of the uterus are by no means uncommonly found after death in women who are carried off by all kinds of diseases. If small, and placed beneath the peritoneal surface, they may be productive of no inconvenience whatever, but if large they may produce much local uneasiness; or by pressing on neighbouring organs, as the bladder or rectum, disorder their function, and impede more or less the evacuation of the urine or fæces. It is not common for them to prove fatal, but the above case exhibits one mode in which they may become so. I have already (Case II.) illustrated one change which fibrous tumours of the uterus undergo in process of time, namely, their condensation, and more or less perfect calcareous degeneration. This, also, is one of the changes to which tubercle is subject; but as this matter is capable of a process of softening, so, too, is the fibrous tumour. It was in this manner that the cavity which I have described became formed. Whether originally due to inflammation or not, (and I should be disposed to regard the latter as most probable,) that process was evidently going on at the time of the patient's death, as evidenced by the large quantity of lymph which was discovered in the cavity. The disease had proved fatal by the extension of the softening process to the external surface, and perforation of the peritoneum.

2. Directing our attention to the peritoneum, it is observable that there appeared to have been no endeavour made at preventing the effusion of the contents of the morbid cavity by the formation of adhesions.

Where perforation of the wall of the stomach succeeds as the result of a *large* ulceration of the mucous surface, it is common for adhesions to occur to a neighbouring organ; but in the instance before us, the cause of perforation was probably not an inflammatory one, the opening through the membrane taking place by gangrene, from defective vascular supply, the substance below it undergoing death. Perhaps, also, there was present some amount of liquid effusion in the peritoneum previous to the perforation. The peritoneal membrane exhibited indications of recent and of former inflammatory action, the latter in the firmly organized coating of lymph which covered most of the parietal peritoneum, and the former in the ascitic effusion, vascular discoloration, and recent lymph. The one was probably the result of irritation of the large solid tumour, the latter clearly due to the perforation. The large amount of effused fluid may be accounted for by the congestive character of the inflammation. It was remarkable that there was no suspicion either of perforation of the peritoneum, or of peritonitis, excited in the mind of the medical attendant by the symptoms presented by the patient; no sudden occurrence of pain induced by the former, and no local pain and tenderness to indicate the latter. The age of the patient will readily account for this, since the obtuseness of sensibility of advanced years tends to render latent inflammatory disorders, which, in a younger person, would exhibit themselves by marked nervous phenomena.

3. I desire lastly to draw attention to the disappearance of the cervix uteri in connection with a tumour of the fundus of the organ. I have already noticed a similar occurrence where the body was greatly enlarged by being the seat of hypertrophy, fibrous tumour, and cancerous growth. In these two instances it was plainly due to the changes the organ had undergone; in others, however, the cervix is only partially destroyed, from adhesions occurring between it and the neighbouring part of the vaginal wall.

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF PROFESSOR SANDS COX, F.R.S., SENIOR SURGEON TO THE HOSPITAL.

Reported by Mr. PETER HINCKES BIRD, late Resident Medical Officer.

CASE XXII.

STRANGULATED INGUINAL HERNIA.

Joseph Sandbrook, aged 43, slater, admitted on December 25th, 1846, at 11 o'clock p.m., under the care of Professor Cox. He states that he has had a rupture in the right inguinal region for four years, which he could return. About four months ago he perceived a tumour in the left inguinal region, which

was small, and easily returned. He has never worn a truss.

Yesterday, at about 11 p.m., he perceived the tumour in the left inguinal region to be larger than usual; he felt sick, and vomited, and the straining during vomiting forced something down which appeared "like an egg." He tried to reduce it himself, but he could not succeed; he was attended by a surgeon, who tried to reduce it, employing venesection, but without success. During this time the vomiting continued, accompanied with dragging pain across the abdomen. The vomited matters are stated to have been dark, and of a bitter taste.

State on admittance.—There was a large oval tumour on the left side, extending from the external abdominal ring to the middle of the scrotum; it is soft and compressible in one part, and inelastic and firmer in another; it gives an impulse to the hand when the patient coughs. He complains of a severe dragging pain all across the abdomen, and of pain in the tumour, which is increased when it is handled; there is also some tenderness over the abdomen, and the countenance has an anxious expression; pulse 96, small; tongue coated; his bowels were opened this morning. The tumour in the right groin is soft and easily reduced. The taxis was carefully employed to the tumour in the left groin, but without relief; the patient was then put into a hot bath, and the taxis again applied, but without success. An enema of gruel was administered, which brought away some fecal matter, and the introduction of an elastic tube into the rectum, as recommended by O'Beirne, relieved him of a considerable quantity of flatus, without producing any effect upon the tumour.

26th. Has passed a very uneasy night; has vomited several times; matters vomited are of a greenish colour, sour taste, and offensive odour; complains of considerable pain over the abdomen and in the tumour; the tongue coated; pulse 98. Another attempt was made to reduce the hernia, but without success. With the consent of the patient, therefore, the operation was determined on, and was performed in the following manner:—The groin having been previously shaved, and the patient being placed in the recumbent posture, with the shoulders slightly raised, an incision was made by Mr. Cox, commencing about an inch above the external abdominal ring, and was continued to the bottom of the tumour. This incision was about three inches long; the first incision divided the integument and adipose tissue. In making this incision, and in dissecting off the fat, three small arteries were wounded, one of which required to be ligatured. The coverings of the tumour were then divided on a director one after another; the sac, however, was not opened. The stricture was found to be at the external abdominal ring, which was divided by directing the knife upwards; the intestine was easily returned; the edges of the wound were brought together by two sutures and strips of adhesive plaster, and a pad of lint and roller applied. The patient bore the operation very well, and expressed himself much relieved. Broth diet.

Mist. Salin., oz. iss., quartis horis.

27th. Feels comfortable; tongue slightly coated; bowels opened once; slept well last night; pulse 102, soft; no tenderness of the abdomen. Lemonade.

28th. The wound was found united by the first intention in its whole extent; no tenderness of the abdomen; bowels open four times; tongue slightly coated; sleeps well.

January 5th, 1847. Quite well. To have a truss.

The operation for strangulated hernia without opening the sac has been practised by Munro and Cooper, in large hernia, but it is Mr. Key who has raised it in the estimation of practitioners of our own day. He recommends it principally on account of mischief arising from the exposure of the inflamed bowel to the air and light, and to manipulation. South believes, with Lawrence, that peritonitis often results from pressure upon the neck of the sac, by the stricture being kept up for hours, and even days, yet an additional cause, he says, "is to be found in the unwarrantable, violent, and repeated squeezing, which the rupture suffered during the use of the taxis." A good objection to the operation, without opening the sac, is the possible gangrenous condition of the intestine or omentum, and the question arises, can this condition be detected? Mr. Key believes it may. Mr. South holds a different opinion.

"I cannot," he says, "agree with Key that the ordinary characters of a completely sphacelated bowel are distinct enough, for I am quite sure I have seen them all existing more than once or twice, without any gangrene, but simply depending upon the unwarrantable violence used in attempting to return the rupture; but I do agree with him that it sometimes happens that no such change takes place in the swelling, and then the evidence of gangrene is much more equivocal. It is by no means unfrequent to find an intestine mortified, although the time it has been strangulated is short, and not the slightest external sign leads to the presumption of its condition; as, on the contrary, it now and then happens that the exterior of the swelling is tender, inflamed, doughy, and crackling, from the causes I have just mentioned, and yet the intestine within be healthy, and the patient recover the operation. As regards the loss of elasticity in the swelling, I believe it a very uncertain sign; the intestine may be gangrenous, but the sac full of fluid, as is commonly the case under such circumstances, and then the elasticity remains. The only sign which I think can be relied upon, though even that is doubtful, is when the intestine has burst; then, indeed, although the redness, doughiness, and crackling still remain, the rounding of the swelling subsides, and when a little pressure is made on it a central hollow is produced, and a sense of yielding beneath, very different from the pitting caused by pressure on œdematous cellular tissue."

In the hospital practise of M.M. Boyer and Mener, since the year 1833, fifty-eight operations for strangulated hernia have been performed, the results of which are interesting, as regards the propriety of employing the taxis. Thirty of these cases were operated upon by M. Boyer. From 1834 to 1839, M. Boyer did not

proceed to the operation till prolonged attempts at reduction had been made. During this period *nine* cases were operated on, of which, *eight* died, and *one* recovered. From 1839 to 1843, he employed the taxis to a much more limited extent. *Seven* cases were submitted to operation, of which *four* died, and *three* recovered. From 1843 to 1846, he had almost entirely abandoned the use of the taxis, and uniformly proceeded, almost at once, to the performance of the operation. The results of this practice were, that of twenty-eight cases operated on, *two* died, and *twenty-six* recovered.—*Revue Medico-Chirurg.*, Feb., 1847.

The practical deduction to be drawn from these statistics is, that the employment of the taxis is productive of much harm. No statement, however, is made as to the results of the cases which were successfully treated by the taxis. To judge fairly of the good or evil resulting from the attempts at reduction, the entire number of cases of strangulated hernia admitted into the hospitals should be given, and it is almost certain that in such an aggregate of cases the number of recoveries would be greater, where the taxis is moderately and judiciously applied, than where the operation is uniformly at once performed.

The conclusions drawn by M.M. Boyer and Mener are, first, that the operation for hernia, performed at an early period, and before symptoms of peritonitis have declared themselves, is almost free from danger; and secondly, that peritonitis never occurs subsequently to the operation, if it has not been present before its performance.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, JUNE 27, 1849.

THE subject of medical ethics is now attracting much attention among the members of the profession, and we think it is one well deserving their most serious and attentive consideration.

Of all the learned professions, there is none in which more ill feeling is frequently created, by a want of strict attention to those principles which actuate men in the conventionalities of life, than that of medicine. The causes of this are various. We believe the profession, as it at present exists, is modelled upon a wrong basis—there is a want of order in its internal structure.

Its constitution, its laws, its principles, and its practice, are mixed up in a heterogeneous whole, without any admixture of that wholesome discipline which obtains in the law, or in the church. We believe this state of things is not of recent origin—it is the growth of years, in fact it is the result of that spirit of progress which marks the age in which we live. The

profession of medicine has outgrown itself, and nothing but a remodelling of its entire fabric can remove the evils which now press upon it so heavily.

When the Apothecaries' Act of 1815 came into existence, the three classes of physicians, surgeons, and apothecaries, were well defined, and the measure introduced something like order in the profession; though, as the result has proved, it was only calculated for a temporary good. In the present day, after thirty-four years of, we think, useful service, it is evident that the requirements of the times demand a much more solid and comprehensive measure, and it is this very want which, in our opinion, causes so much unhealthy feeling to exist among medical men.

In 1815 the chemist and druggist was content to dispense prescriptions and sell drugs; in 1849 he prescribes himself, and usurps the functions fulfilled by the apothecary of 1815. In 1815 the apothecary called in the consulting surgeon or the physician to assist him in his deliberations whenever he felt any difficulty. In 1849 the progress of medical knowledge—caused we believe in a great measure by the rules and regulations of the Society of Apothecaries—has materially lessened the difference between the physician and the general practitioner. The consequence naturally resulting from this is, that the physician is now more frequently consulted without the general practitioner, to the injury of the latter, and the benefit of the chemist and druggist. Further than this, the qualifications of the general practitioner are more unequal than they were in 1815. Many of the body are amongst the best educated men in the kingdom;—gentlemen by birth or attainments, and devoted to the science of their profession, they find themselves altogether in a wrong position. Attached by custom, and the errors of the Act of 1815, to the false system of dispensing and selling medicine, they are continually waging war with themselves. Science and its tributary streams on the one hand, trade with its £. s. d. on the other. The one exalting the energies, the other depressing the best feelings of the student of nature. Hence there is a continued conflict. Such a man has two natures. At the bed-side of the sick, or before his midnight lamp in his study, he feels himself a gentleman. When mixing his pills and draughts, or making out a long list of the same at so much per dozen, he is reduced at once to the position of a tradesman.

In the great body of general practitioners of the present day, there is every shade between these two extremes. Some pay much attention to the science, and little to the trade; others care little for the science, and make everything they can of the trade. Can we wonder, then, that these classes come into collision, and that we daily hear of bickerings, and heartburnings, and jealousies, and all the other items in the long list of medical squabbles which have placed the profession of medicine in its present unsettled state. Men are not to die because their medical adviser chooses the trade rather than the science, or because he is obstinately wedded to things as they existed twenty, thirty, or forty years ago, and refuses, or is incapable of, studying those things which have altered the very foundation of his art! Yet so it is, and ever will be, until the system of dispensing medicine by the scientific practitioner is done away with. We believe we have touched upon one of the great difficulties of medical legislation, while we are confident we have pointed out one of the most frequent causes of the quarrels among medical men. It is a difficult thing to make some men believe that others can be more highly educated, more acquainted with profound truths, or (and as a consequence) more capable of detecting disease, than themselves; and hence they fret and fume, and think themselves the most ill-used people in the world, should the public in these days of enlightened progress have more discernment, and prefer the man of science to the man of drugs.

We could have enlarged greatly upon this subject, which we believe to be one of paramount importance to the profession, and the interest of medical science, but for the present we must content ourselves with having drawn the attention of our medical brethren to one, at least, of the evils, without the removal of which, in our opinion, all medical legislation will be useless.

THE death of the late Editor of this Journal will, at the approaching Anniversary Meeting in August, impose upon the members of the Provincial Association the important duty of selecting a successor; and this leads us to discuss briefly and temperately the probable consequences of a change, which is so vitally connected with the interests of our Association.

That much of the success hitherto attained by

this Society has arisen from the high character of its publications, will scarcely admit of doubt, and to ensure a continuance of this, ought to be one great aim of those upon whose choice will depend the appointment of a new Editor. Of these publications, the "Transactions" are almost independent of his control, as the Worcester Council has hitherto undertaken the selection of the papers, which, being entirely the result of the talents and labours of the contributors, have only required that careful superintendence through the press, so ably afforded by our late Secretary and Editor; but in reference to the Journal, it is necessary to take care, not only that there shall be no deterioration in its character and progress, but that every reasonable improvement shall, if possible, be carried out.

In considering this important matter, it must be recollected that this periodical stands upon a foundation totally different from that of other publications, which are ordinarily considered its competitors. This difference becomes manifest, when we take into consideration that a large association of gentlemen, practising a liberal profession, are criticising with anxious eyes, each number as it issues from the press, and that they are doing this not as ordinary subscribers, but as *proprietors*, having a common interest in its progress, equally annoyed by its failure, and exhilarated by its success. Under these trying circumstances it requires more than ordinary firmness in the Editor, to avoid shrinking under the criticisms, however friendly the manner, and kind the intention, which we know have been so freely tendered by those, who, if mere subscribers, would not probably have felt either the necessity or inclination for interference.

The duties of an Editor, as all to whom such occupation is familiar can testify, are far from being light or easy, and without the friendly consideration and indulgence of those for whom he labours, the result will in all probability be comparatively sterile. It has, however, been one of the great objects of the Provincial Association, to disseminate among its members a spirit of liberal and gentlemanly feeling, and so well have its efforts been rewarded, that we are assured, that whoever may in future be selected to perform the important duties of providing intellectual food for the readers of this Journal will not only receive thanks for services well performed, but also encouragement to persevere in his well-directed efforts, even should they

not at once attain a character, placing them beyond the reach of criticism.

While, therefore, in order to produce a Journal which shall be in every way worthy of our Association, we would call upon each member to lend a helping hand according to his abilities, to support its progress and enhance its merits; we would equally call upon the future Editor, whoever he may be, carefully to avoid risking the loss of the high character attained by his predecessor for impartiality and moderation of opinion; and while he should endeavour to preserve that gentlemanly tone of feeling which endeared our late Editor to his associates, we would have him engraft upon these characteristics some slight increase of independence of opinion, the absence of which under the late management, was, we believe, the only subject of complaint.

In short, if the future Editor applies himself to his work with an honest intention to exert his best powers for the benefit of his readers; if he is watchful to acquire a knowledge of passing events, and diligent to exercise a right judgment thereon; if he continually bears in mind the objects of the Association, and avoids entering hastily and intemperately into the arena of medical politics; if he does his utmost to repress quackery in every form, and promotes as much as in him lies the welfare and interests of the regular members of the profession; and if he is found in addition, to exercise a just discrimination in the selection and arrangement of the matter offered him for publication, he will most surely do honour to himself and advance the interests of the whole medical profession.

Reviews.

A Physician's Holiday, or a Month in Switzerland, in the Summer of 1848. By JOHN FORBES, M.D., F.R.S. London: Murray. 1849.

Any work by Dr. Forbes would command the attention of our body, and this has peculiar claims, for how many amongst us are either planning an excursion, or hoping for one; or if the iron chain of circumstances confine us to our post, may be glad to meet with the mind's eye scenes which the bodily eye has no chance of looking upon. For all such Dr. Forbes's tour is especially adapted, for it unites the practical usefulness of a "hand-book," with the entertainment and instruction of the best books of travels, together with the homely directions as to baggage, inns, meals, prices, routes, and all pains-taking

and accurate local information, such as the actual traveller desiderates. These are descriptions vivified by imagination and feeling,—not old outlines, but glowing with life, so that the reader not only sees what an observant thoughtful eye indicates, but sympathizes with the warm feelings which natural scenes of beauty and grandeur excite in a capacious human heart. Jean Paul's well-known saying that natural scenery to be well described must be looked at in the camera obscura of a human breast, is more clearly illustrated by this volume than by any book of travels we have recently met with. The complete freedom from affectation is here very agreeable; for the endeavour has evidently been to state, as a part of the description, the feelings which it excited, without any exaggeration on the one hand, or on the other hand, without any of that false weakness which would conceal natural emotions. This manly, fearless, utterance marks the whole book, and gives it an exhilarating freshness. One of the truest tests of success in description is in the power of leaving a strong and definite impression on the reader's mind. The falls of the Rhine; that glacier of the *Mer de Glace* which looked like a gigantic river frozen suddenly whilst falling over a precipice; "a Titanic waterfall, white and foamy, but eternally silent;" the huge avalanche watched in its fall; the early morning view of the conical Matterhorn; the amphitheatre of snowy mountains from the Riffelberg; are pictures which occur vividly when the book is closed, and attest the writer's real power. This supposes accuracy and distinctness in observation, imagination to give mere descriptions life by impersonation, and the capacity of feeling strongly the charms of the Beautiful, or the awe of the Sublime. Believing fully that the *status* of our profession depends very much on the real mental ability of its members, we rejoice in the production, by a physician, of a book adapted to all readers, which proves that a life spent in the joint pursuit of medicine, as a practical art, and as a science, has not prevented the high culture of the imagination, and has enlarged, instead of contracting, the sympathies. The constant practice of observation which the medical art demands may be the reason of the physician's success in painting such numerous scenes, so rapidly surveyed, in so short a time.

But with so much description there are more personal details, which carry you along with the travellers, and sufficient notices and anecdotes of men and manners to diversify and relieve. And throughout, Dr. Forbes neither forgets nor sinks his own profession. There is a preliminary chapter on the persons likely to be benefitted by travelling,—how it benefits,—sanitary hints to travellers, clothing, food, and regimen for invalid travellers; this is eminently judicious, whilst the chapters devoted to the celebrated hot baths of Leak, (where the sick sit in hot water from three to

eight hours a-day,) and on the Cretins, and on Dr. Guggenbühls establishment for them on the Abenburgh, will repay careful perusal. A chapter on the various modes in which physicians make an annual holiday could only have been written by one intimately acquainted with the habits of the London genus, and is highly amusing.

We again thank Dr. Forbes for a book which must send many of us, and of the public, over the same course with the advice and companionship of a "*mens sana, in corpore sano*,"—of a naturally powerful and highly cultivated, and very complete mind, in a strong energetic body. For looking at the bodily toil as well as mental labour of these few weeks, as indicated in this volume, we have asked ourselves with some wonder, "If this is Dr. Forbes' holiday, what must be his hard work?" The answer came on looking at our book-case, from four great cyclopedia volumes, and twenty-four octavos of a *Quarterly Review*, carried through whilst the editor was engaged principally in a wide country practice.

Before we conclude we would direct attention to the Swiss mode of preparing butter for winter use without salt, by simply boiling it. A mass is placed on a slow fire in a copper pan, so as not to come to boil in less than two hours, then it is gently boiled for two hours, and it takes two hours to cool. The fluid part, (for there is a white sediment) is poured into jars for winter use, and remains perfectly good for years. Dr. Forbes was at considerable pains to ascertain the exact formula in hopes that the plan might be adopted at home, and supersede that "horrid compound," sold to the poor as salt butter, which must be injurious to health. We hope that those who are brought into contact with the makers of salt butter will mention this plan, which seems likely to be important in a sanitary, as well as in a domestic point of view.

The Lumleian Lectures for 1849, delivered at the Royal College of Physicians, London. By R. B. TODD, M.D., F.R.S. *On the Pathology and Treatment of Convulsive Diseases.* 8vo, pp. 42. (Reprinted from the *London Medical Gazette*.)

However unusual it may be to offer any remarks on the contents of contemporary periodicals, we cannot avoid recommending to the notice of our readers the above very interesting Lectures, which, we believe, embody the most clear and complete view of the pathology and treatment of convulsive diseases which has, up to this time, been published in this country.

Dr. Todd has long been engaged in a close examination of the anatomy, physiology, and pathology of the whole nervous system, and is, therefore, peculiarly qualified to unravel the mysteries which continually envelope the intricate subject he has selected for elucidation.

There is certainly nothing new in the division of these diseases, adopted in these lectures, into "choreic, tonic or tetanic, and clonic or epileptiform;" but the descriptions of each form are so clear, and the reasoning so logical and sound, by means of which a distinct part of the nervous system has been assigned as the seat of each separate affection, that we cannot refuse our assent to the conclusions of the author.

Our limits will not allow us as we could wish, to present to our readers a few extracts which have more particularly attracted our attention; but we would especially recommend the careful perusal of the experiments and observations, scattered through these lectures, on the treatment of nervous diseases by the administration of æther or chloroform, which, in Dr. Todd's hands, in the cure of epilepsy more particularly, appear to have been eminently useful.

INQUIRY INTO THE TREATMENT OF BURNS AND SCALDS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND
SURGICAL JOURNAL.

SIR,

At the last Anniversary Meeting of the Provincial Association I exhibited some specimens of incombustible calico, muslin, paper, and hay, which had been entrusted to me and prepared by Dr. Robert Smith, of Manchester. At that time I was not able to state the composition of the fluid, by immersion in which they had been rendered incombustible. As this discovery, if generally adopted, would render injury to the human body impossible from the clothes taking fire, I am sure that a knowledge of its composition, &c., will be very acceptable to the members of the Association, and I accordingly forward to you a copy of Dr. Smith's paper for re-publication in your Journal.

I have received some additional communications on burns besides those which have already been printed in the Journal. Of these, one of the most important is the following, from Dr. Warren, of Boston, United States, Professor of Anatomy and Surgery in Harvard University, and one of the Honorary Corresponding Members of the Provincial Medical Association. The rest shall be forwarded to you shortly.

I am Sir,

Your obedient servant,
SAMUEL CROMPTON.

Manchester, June, 1849.

ON A MODE OF RENDERING SUBSTANCES INCOMBUSTIBLE.

By ROBERT ANGUS SMITH, Ph.D., Manchester.*

I have often been surprised that, considering the number of materials which will not burn and the small number which do burn, we should be compelled to build houses so liable without constant watchfulness to instantaneous destruction; that we should go also to

* From the Philosophical Journal.

sea in vessels made of a most combustible substance filled with enormous fires, frequently under the care of ignorant men. I think, therefore, I may be excused when I endeavour to add to a knowledge of the mode of rendering substances incombustible, or the theory of the mode to be sought after, even if the addition which I make be but a very small one.

Silicate of potash has been considered good. It is a soluble glass which was expected to cover the fibre of cloth or wood, and so protect it from heat. This does act to some extent, probably in the same manner as stones do when put into a fire of wood or coal; they take heat but give none, and are also bad conductors. If silicate of potash remained as a glass, it would act also by keeping out the air; but this does not seem to be the case, as it falls after a time to a powder.

It struck me that the mode of preventing combustion was not by protecting the wood from the fire merely, as heat must cause combustible gases to rise from wood, whether there be incombustible substances mixed with it or not, and these gases will force their way to the surface where there is no longer any preventive to burning. My object, then, was to find a substance which would render the wood unfit to burn, and would cause it to give out gases which would not burn; so that whilst the wood itself was being preserved, except where in contact with the fire, the gases would assist in extinguishing the fire.

I first tried phosphate of magnesia and ammonia, thinking the ammonia given out would be of use in extinguishing the fire; but this was of no value, as a piece of calico required to be made quite stiff with it before it was rendered incombustible. The calico was prepared by dipping in a solution of phosphate of magnesia, in muriatic acid, and then in ammonia. It seemed to me that the earthy salts are of little use for the purpose required, and that the amount of solid matter incapable of evaporation left on the cloth, assists in a very small degree.

Sulphuric acid, however, seemed to present the most promising characteristics of a substance incapable of burning, and of acting so strongly on vegetable substances as to make them incapable of burning. Sulphuric acid itself is a body perfectly burnt, or we may say overburnt, having an atom of oxygen given to it by artificial means, so to speak, which atom is difficult to separate, and therefore not resembling the oxygen of many highly oxidized bodies. It requires a high degree of heat to raise it to vapour; and the vapour formed is sluggish and heavy, remaining long where formed, and quenching flame wherever it is. It destroys the texture of wood also and other vegetable substances, causing them to give out after a time gases which do not burn, mixed with some which do burn; but if there be enough of acid, forming a mixture which does not burn. The wood also cannot be again induced to become combustible until it be heated to redness, so as to remove all the sulphuric acid, leaving only charcoal.

If sulphuric acid, then, could be introduced into wood just at the time that the fire was going to take place, the fire would cease to take place; and this we can do easily by saturating the wood with sulphate of ammonia. When there is no fire present, there is no sulphuric acid present, as such; but as soon as the heat rises, ammonia goes off, and sulphuric acid is instantly

presented to the wood. The ammonia does not come off quite pure, it is mixed with nitrogen and sulphurous acid; and this disengagement of gases is of advantage in extinguishing fire; when the heat rises to 536° the sulphuric acid is then left to act on the wood in part and to volatilize in part, and that which I have mentioned takes place. The outside of course would first undergo the change, and the inside would be protected by the incombustible outer part; if the fire continued to act long, the inner layer would undergo a similar change. I imagine, then, the acid acts in a double manner; it makes the wood refuse to burn and it puts out fire. As sulphurous acid is given off in this process, the action is also similar in one point of view to that of sulphur, which has long been used for fire in chimneys.

I have no doubt that a house built of wood prepared in this manner might have a fire lighted on the wooden floor without danger, burning only on the spot to which the fire was limited. A ship also would be safe, even if the cinders did fall from the grate in stormy weather.

I know that muriate of ammonia has been used, and that it acts very well; but I think the sulphuric acid is superior, the ammonia being merely to keep it innocent; any other volatile base might do. I am sorry, however, that this is not perfect; its solubility in water is a great disadvantage, as it cannot be applied to clothes to be frequently washed. True, it is so cheap that it might be applied every washing where there are peculiar dangers; but if a person were standing very near the fire, the ammonia would in part be evaporated, and the acid remaining would be enough to injure the fabric. There are, however, cases, such as curtains, to which this could not apply, and where it would be valuable.

Sir William Burnet's liquid is chloride of zinc; he uses it for preserving wood and canvass, and also for preventing fire. I am certainly surprised that more use has not been made of it, being, as far as I have seen it, so efficient. I believe the manner in which the chloride of zinc acts is very similar to that of the sulphuric acid, destroying the organic matter on the approach of heat, and rendering it incombustible. It can be introduced into wood at a specific gravity of 2000, I believe; sulphate of ammonia cannot easily be used above 1200. By heating the solution more may be attained. Sulphate of ammonia is cheap and easily procured and used, not hurting anything with which it may come in contact, and therefore more easily managed in households.

The chloride of zinc is said to unite with the fibre. This cannot be said for the sulphate of ammonia. It would not, however, come from the centre of a beam of wood, even if immersed in water, as the water enters with great difficulty into wood; and the solution itself cannot be introduced without forming a vacuum in the saturating vessel, and so removing all the air from the wood.

The first time I used this solution I found a large quantity of mould formed, and indeed it contains all the elements to increase its growth. The second time the solution was boiled in an iron vessel, and no mould formed on it; on the contrary, mould was destroyed by it. The sulphate of ammonia dissolves iron rapidly, and forms a double salt which is deleterious

to such growths. I imagined any other metallic salt would do, and used ordinary chloride of manganese prepared in the laboratory, which killed all such fungi rapidly, and no more have grown after standing eleven months in contact with organic matter.

I believe there are many ways in which this may be used. My wish was to find a substance suited for building fire-proof ships, and I believe this would do; at any rate the ships would be fire-proof, experience could alone tell if any other objection followed. It does not render the wood hard, heavy, or brittle.

I believe it would be of the greatest advantage in mills, which now suffer so much from fire, diminishing or rather entirely removing the expense of insurance. It does not hurt colours; so that even coloured goods might be dipped when kept long in one place, or when sent in vessels abroad. Possibly some delicate colours may be attacked, but this must be a rare case.

I am more desirous of seeing ships built of an incombustible material, the means of escape at sea being few and confined to few; and whilst there is any hope of doing it easily, I scarcely think it proper for any one to neglect what information may exist on the subject.

ON THE TREATMENT OF BURNS & SCALDS.

By PROFESSOR WARREN, of America.

Boston, U.S., July 25, 1848.

Dear Sir,—A short time since I received your favour of June 16, requesting a reply by the 18th of August. The object of the British Provincial Medical and Surgical Association, which has procured me the honour of your letter, is one of great importance, and, if my experience presented any new facts which might improve this interesting part of surgical practice, I should be most happy to contribute them. I have procured from the records of the Massachusetts General Hospital as many cases of burns as could readily be obtained, and of these I send a copy. My own experience on this subject I will endeavour to convey to you as far as the time for making the return will allow. The following are the remedies which have been employed in my practice:—

Cold Water.—When the cuticle is not off, and the cutis and subjacent textures are not disorganized, cold water is the best remedy I am acquainted with. It has been advantageously used by layers of linen or cotton-cloth, frequently wet, and by continuous affusions. When the injury is not very extensive, ice may be very beneficially resorted to.

Warm Water.—This has been used when the vitality of the textures was more or less impaired, by means of thick compresses, covered by a layer of gummed silk or India-rubber cloth.

Exclusion of Air.—As the oxygenous part of the atmosphere is irritating to the raw surface, substances which exclude its contact give relief. For this purpose may be employed the solution of gum arabic, cotton-wool, or thin layers of India-rubber cloth. Flour, and burnt flour, so long used and so generally known, I have employed with good effect. Charcoal I have applied pretty extensively, in the form of powder, ointment, and poultice, and it has appeared to give relief, whether by exclusion of the air, or by absorption of its oxygen, I know not.

Cerates and Ointments.—These have been very frequently used; they are convenient in protecting the injured part from the contact of external bodies, but their principal advantage lies, no doubt, in the exclusion of the air.

Poultices.—Cold poultices may be used in the early stage of burns without disorganization, and warm when the parts are destroyed. Their softness, moisture, and power of protecting, place them among the most valuable of remedial agents.

Narcotic Solutions.—Watery solution of opium, of poppies, and of the leaves of hyoscyamus, I have known to give great relief from suffering when the cuticle was removed. If this is retained, they cannot be employed with any decisive effect, unless applied very extensively, and for some time. A decoction of tobacco produces more evident results, but this narcotic is too virulent to be used over a large surface.

Lime-Water and Linseed Oil I have used very often; it seems to alleviate the sufferings of the patient, probably by securing the injured part from the atmosphere.

Spirits of Turpentine, Dr. Kentish's favourite remedy, in conformity to his high recommendation, I used in the early part of my practice, but, as its immediate effect was often terrible, and its ultimate influence not greater than that of other articles, I have not used it for many years, nor do I know any one here who has.

Constitutional Remedies.—It is hardly necessary for me to say, what is universally known, that, in extensive burns, accompanied with depression of the vital powers, cordials should be administered internally; and that, on the other hand, when there is violent reaction, local or general blood-letting is the best means of giving relief.

The articles above mentioned may be arranged in the following manner:—

I. Applications calculated to abstract heat.

1. Ice.
2. Cold water.
3. Cold poultices.
4. Evaporating liquids.
5. Affusion of cold water.
6. Solutions of the salts of lead.

II. Applications intended to exclude the external air.

1. Solution of gum arabic.
2. Cotton wool.
3. Flour.
4. Various ointments.
5. Linseed oil and lime-water.

III. Anodyne applications.

1. Watery solution of opium.
2. Infusion of the heads of poppies.
3. Infusion of the leaves of hyoscyamus.
4. Weak infusions of tobacco.

The statements above made are so briefly expressed, that I fear they will be of little value in the accomplishment of your design; they contain the best account which time permits, and I heartily wish may, by adding to the mass of facts, afford some little aid in the formation of general inductions.

I have the honour to be, very respectfully,

Your friend and servant,

JOHN C. WARREN.

S. Crompton, Esq.

A LIST OF PATIENTS AFFECTED WITH RECENT BURNS, FROM THE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL.
Communicated by PROFESSOR WARREN.

Entered.	Name.	Age.	Extent of Burn, &c.	Time elapsed since Accident.	Treatment.	Discharged.	Results.
1826 Jan. 16	Experience Brewer	82	"Face and head" burnt by "dress taking fire"	Several days	Dressings of simple cerate, nutritious diet and cordials	Jan. 27	Well
1830 Jan. 30	Mary J. Prescott	—	Extensive burn on the back, caused by clothes taking fire	8 weeks	Dressings of simple cerate, afterwards astringent applications	May 2	Well
1832 Jan 5	Andrew Powderly	27	Scalded ankle with hot water. Skin destroyed for the space of one inch and a half square	1 week	Simple ointment	Jan. 17	Well
Apr. 22	Charlotte A. Jones	24	Burn of one arm, and small part of fore-arm. Skin destroyed	3 or 4 weeks	Poultices. Afterwards astringents	Oct. 19	Dead. Gangrene supervent
Sep. 11 1833	Samuel Knox	22	Burnt over the whole body with gunpowder	24 hours	Simple dressings	Oct. 30	Convalescent
Mar. 7 Apr. 27	James F. Mills Joseph Morrill	24 8	Scald of right foot. Skin vesicated Burn of greater part of the left side, from axilla to foot. Cuticle separated	1 week 10 days	Poultices. Afterwards Ung. Stramonii Ung. Altheae	April 1 May 10	Well Well
May 23 1834	Anna Brady	36	Left hip and thigh, and right leg, badly burnt. Some sloughing	12 hours	Linseed poultice	July 20	Well
Sep. 11 Nov. 7	Joseph Scammell Ann Lawler	22 35	Severe burn of left side of the face and left fore-arm Burn of whole of the left arm and part of the left side. Some sloughing	36 hours 4 days	Ung. Cetacei. Afterwards Ung. Carbonis Poultice to most painful parts; elsewhere Ung. Carbonis	Sept. 26 Aug. 21	Convalescent Not relieved*
Nov. 29 1836	Caroline Record	26	Scalded with hot lard. Vesication three inches square	10 days	Ung. Altheae	Dec. 18	Well
Feb. 19 1837	Katherine Larkin	27	Burn of both legs by boiling water. Vitality of skin destroyed	12 hours	Poulticed till separation of sloughs	May 22	Well
Oct. 7 1838	Mary Robbins	40	Scalded the top of left foot. Cuticle separated	10 days	Leeches and a lotion of Sol. Plumbi Acet.	Oct. 21	Well
Jan. 13	George Pronk	19	Burnt over both hands, wrists, and face. Skin vesicated	1 hour	Linimentum Calcis. Afterwards Ung. Altheae	Jan. 20	Relieved. Afterwards died
Dec. 19 1839	Mary Cooley	23	Both fore-arms burnt. Skin destroyed in some parts, vesicated in others	2 hours	Cotton batting and Linimentum Calcis	Jan. 15	Relieved
Aug. 14	John Macauley	37	Nearly the whole face burnt by sulphuric acid. Integument destroyed	12 hours	Poultices. Afterwards simple cerate	Nov. 7	Well
Aug. 20	John Dunn	23	Face and arms burnt with gunpowder. Skin vesicated	1 hour	Linimentum Calcis. Afterwards Ung. Kreosoti	Nov. 2	Convalescent
Oct. 5 1840	Ann Rogers	30	Burn of right side of the face, neck, and chest. Considerable sloughing	18 hours	Linim. Calcis. Afterwards Ung. Fuliginis	Nov. 2	Relieved
Mar. 28	Samuel Shaw	33	Burn of whole back and the right side, from shoulder to sacrum. Some sloughing	12 hours	Linim. Calcis. Afterwards Ung. Kreosoti	Oct. 13	Much relieved; ulcers healing
Oct. 6	Ann Hanson	18	Both arms and hands, chest, right side of the face and neck, and right thigh	10 hours	Linim. Calcis and Ung. Aquae Rosae	Nov. 17	Dead

* Ulcers left by sloughs granulated; but granulations repeatedly sloughed away as soon as formed.

A List of Patients affected with Recent Burns, from the Records of the Massachusetts General Hospital.

Entered.	Name.	Age.	Extent of Burn, &c.,	Time elapsed since accident.	Treatment.	Discharged,	Result.
Dec. 26 1841	Sarah Neville	36	Whole of body and limbs, except back of the neck, buttock, and both legs. Collapse	24 hours	Opiate Solution	Dec. 26	Dead
Apr. 19 1841	Margaret Cassidy	21	Burn of the left arm. Slough $4\frac{1}{2}$ by 3 inches in size	2 hours	Olive oil and opiate fomentations	May 14	Well
Dec. 22 1842	Betsy Sutherland	15	Burn of right arm. Slough of skin seven inches long	1 week	Poultice (erysipelas and pneumonia supervened)	Apr. 20, 1842	Dead
Jan. 26 1843	Peter McKenna	25	Burn of face and both hands	4 days	Applications of scorched flour and Pulv. Ulmi Corticis	Feb. 26	Well
Apr. 29 1843	Mary Sullivan	18	Scalded the top of foot by boiling water. Much vesication. Some sloughing	18 hours	Simple Cerate	June 7	Well
June 4 1844	William Dillon	45	Burn of the face and hands. Skin vesicated	2 hours	Simple cerate. Afterwards Mucil. Gum. Acac.	July 22	Well
Sep. 18	John Fader	9	Posterior part of both lower extremities, and buttocks. Skin vesicated	2 hours	Mucil. Gum. Acac.	Nov. 28	Dead
Dec. 27 1845	Henry Weagrae	22	Deep burn on the left leg 3 by $1\frac{1}{2}$ inches from a red-hot iron bar	18 hours	Simple cerate. Afterwards poultice.	March 25	Well
Aug. 15	Thomas Sullivan	20	Burn of the face, both shoulders, left arm, and both hands. Superficial	3 hours	Mucil. Gum. Acac.	Sept. 24	Convalescent
Aug. 16 1846	Charles Hart	19	Whole of the face and both hands burnt superficially	12 hours	Mucil. Gum. Acac.	Sept. 25	Well
Aug. 18 1846	John Bartlett	28	Both hands and face. Vesicated	3 days	Mucil. Gum. Acac. Afterwards Ung. Kreosoti	Sept. 5	Well
Jan. 26	Mary Morgan	20	Face, neck, upper part of chest, both arms and fore-arms, whole of back down to loins, and front of right leg	2 hours	Mucil. Gum. Acac., with brandy internally	Jan. 29	Dead
Feb. 23	Patrick Shehan	27	Face and front of neck burnt by gunpowder	18 hours	Mucil. Gum. Acac.	March 27	Convalescent
Mar. 20	Pat. K. Harrington	30	Face and neck, both hands and wrists, and right thigh	10 hours	Warm water-dressing	May 10	Well
Mar. 20	Dennis Lynch	22	Face, both hands, and left fore-arms. Much exo-riation	10 hours	Mucil. Gum. Acac.	April 14	Well
Mar. 20	Daniel Sullivan	30	Face and both hands burnt with gunpowder	10 hours	Partly Mucil. Gum. Acac.; partly warm water-dressing	May 3	Well
Mar. 20	Jerry Harrington	28	Face and neck, both hands and wrists, and right knee	10 hours	Partly Mucil. Gum. Acac.; partly warm water-dressing	April 14	Well
Mar. 21	Hannah Decall	19	Face, right side of neck, right arm and part of back, by hot starch	1 day	Mucil. Gum. Acac. Afterwards warm water-dressing	April 23	Well
Mar. 2	William Lynch	2	Head, face, neck, chest, back, arms and fore-arms, and most of thighs	1 hour	Cotton batting. Opiates internally.	March 2	Dead
Mar. 21	Patrick Kavanagh	20	Face, hands, and wrists, and part of the left leg, foot, and ankle. (Gunpowder)	22 hours	Mucil. Gum. Acac.	April 11	Well
Mar. 24	Joseph Douglass	20	Scalded by steam on the right buttock and left thigh. Deep sloughs	24 hours	Poultices	June 9	Well
June 23	Sylvanus Kueelend	39	Scalded on the posterior part of both legs and thighs. Skin vesicated	$\frac{1}{2}$ hour	Mucil. Gum. Acac.	July 10	Convalescent

(Signed) JOHN DALTON, House Surgeon.

COD-LIVER OIL IN PHTHISIS. DR. RANKING'S INQUIRIES.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND
SURGICAL JOURNAL.

SIR,—I am happy to find, through the medium of your excellent Journal, that the active literary abilities of Dr. Ranking are enlisted in the investigation of the therapeutic efficacy of cod-liver oil in the treatment of phthisis. Any voluntary effort from so distinguished a journalist as Dr. Ranking undoubtedly is, must willingly gain the zealous co-operation of every member of the Association to so praiseworthy an undertaking. Having used the oil with considerable advantage in eleven cases, which I subjoin, I will briefly give you the result of my experience of its palliative and curative effects in the treatment of this formidable affection, which has annually swept away more people than any other disease. Like every other remedy for the cure of disease, the cod-liver oil has already divided the opinions of the profession; whilst some are extolling its virtues, others are as busily engaged in condemning it to the Tombs of the Capulets. I believe these conflicting opinions arise from a simple cause, which I will endeavour to explain. The druggists are at present filtering the oil through charcoal to free it from colour, taste, and smell, which process in a great measure it accomplishes, but not without depriving the oil of some of its best principles. This I am led to believe from having found that this oil is not so valuable as the oil that has not undergone filtration. The colour of the oil which I first used with considerable advantage in a hopeless case of phthisis, was of a yellow brown, and was obtained from Mr. Wooley, of Manchester. The second supply which I received was colourless, and much more pleasant to the eye, taste, and smell. I soon, however, discovered, the advantages which my patient had derived from the use of the yellow brown oil were gradually lost during the use of the colourless oil. This naturally convinced me the second supply could not be genuine. I saw the druggist from whom I had obtained it, and found out that the colourless oil was the yellow brown oil filtered through charcoal. I placed my patient under the use of the yellow brown oil, and her condition soon resumed an improvement. Since then I have heard surgeons express the same views, which more firmly impresses me with the belief that the opinion I had arrived at was not a mere fancy of the imagination. I would therefore strongly advise those gentlemen who have used the colourless oil and found it not answer their expectations, to give the yellow brown oil a proper trial before they prematurely condemn what I consider to be a great addition to our remedies in the treatment of phthisis. Should the subsequent experience of others prove the reality of a valuable medicinal principle of the oil to be lost in its filtration through charcoal, which I have every reason to believe will be the case, the just inquiry which will be made, will be, what principle does the oil lose in passing through charcoal? I do not profess to know myself, and only advance a surmise which chemistry

can demonstrate. By a simple parity of reasoning, important conclusions may be arrived at, should future investigation prove that the oil does become chemically acted upon by charcoal, and lose some important constituent of its component parts by passing through charcoal. Long before iodine was discovered, substances containing iodine in very minute quantities were given for the cure of bronchocele, but from the uncertainty of their action, were doomed to disuse until iodine, which forms the richest discovery in the annals of modern medicine, was made known and proved a safe and easy agent in reducing this unsightly disease. Who can say, after a proper trial, that the cod-liver oil does not possess the best safeguard in the treatment of phthisis, assisted by other means to suit urgent symptoms, that we know of and practice; and if so, what elementary constituent of the oil confers upon us such important powers over what science already knows? Iodine, as I have before said, was, in minute quantities in substances, used and abandoned for the cure of bronchocele; yet, iodine was discovered, and was the remedy for bronchocele. The cod-liver oil must contain some principle which has an influence in subduing tubercles. I hope we shall see the period when this principle will be known, and tubercle as controllable under its influence as bronchocele is by iodine.

The dose of the oil which I have given is from a tea spoonful to a table spoonful three times a day, with the addition of a few grains of powdered orange-peel, or two drops of lemon-juice to each dose. Buttermilk, raspberry vinegar, or rasped potatoes, disguise the taste and smell. The endermic use of the oil has often been combined with compound soap liniment or spirits of turpentine. The unpleasant odour arising from its evaporation when endermically employed, offers a strong objection to its endermic use.

The therapeutic action of the oil is to add increased power to the assimilative powers of the system, which counteracts and keeps in check the insidious ravages of the disease; in one case it granulated an ulcerated cavity in my practice. Whether it will absorb tubercular deposits or not, subsequent experience will demonstrate. It diminishes the secretion of pus, and proportionately increases the secretion of mucus. It heals mucous apthous ulceration of the mouth, and perceptibly cures hectic. I have not generally found it to aggravate the diarrhoea in the last stages of phthisis. In some it fattens, in others it does not increase the weight of the patient. In all cases it does good by prolonging the life, and mitigating the sufferings of the patient, as the subjoined cases will show. The first two cases will be given more fully in order to identify them as tubercular disorganization; the remaining nine will be compressed in their narrative, so as to suit them to the pages of a journal.

CASE I.—Mrs. B., aged 34, became seriously indisposed about two months since, after an attack of influenza, which was then prevailing in the neighbourhood, to which succeeded bronchitis and suppressed catamenia. Phthisis supervened, and at the time the oil was first used, the lung had an extensively ulcerated cavity.

September 1st, 1848.—Extreme emaciation of body and pectoral muscles; breathing hurried under slight exertion; cough troublesome; expectoration pus; aphthous ulceration of the mucous membrane of the mouth; diarrhœa; confirmed hectic; the brick-dust streak over the alveolar mucous surface; dulness on percussion from the left clavicle to the margin of the third rib; garguilement, with pectoriloquy. Pulse 140, weak, and thready. Commenced the use of a tablespoonful of cod-liver oil, with two drops of lemon juice three times a day. Five grains of the extract of henbane at bed-time; generous diet. Wine negus to relieve sickness when required.

September 28th. Has increased in weight; aphthous ulceration improving; expectoration easier, the same in quantity and quality; improved appetite. The state of the cavity the same.

November 8th. The condition of the lung as before; improved appearance; hectic much abated; diarrhœa not so troublesome. On placing the expectoration under the microscope, there was a great change since the use of the oil. The quantity expectorated was about the same; but the quality was different. In place of pus there was a viscid flaky mucus, holding in solution patches of pus.

December 15th. Can walk about the house, and ascends the stairs with greater ease. A much improved appearance; the cavity as before; the expectoration still mucus and pus; will not take any more oil.

January 10th. Has left off the oil three weeks, and has now dyspnœa in the morning. The cavity the same; lost flesh; expectoration contains more pus and less mucus; hectic returning; care-worn countenance; diarrhœa. Mustard poultice over the chest; super-acetate of lead and opium, to suppress the diarrhœa; brandy and water.

February 4th. Does not appear likely to survive many days; evidently diminished vital energy, with increased tubercular symptoms. Has to lie with only one sheet upon her after five in the morning, the hectic is so distressing. After much difficulty, have succeeded in persuading her to take the oil again.

March 10th. Diarrhœa not so troublesome. Two evacuations in the morning, and one in the evening. Respiration easier; more buoyancy of spirits; the condition of the lung and hectic not improved.

April 17th. Her condition does not improve; says she feels less oppression in her breathing since she took the oil for the second time.

May 1st. Pulse 142; extreme debility of body; ghastly aspect; distressing cough, with profuse mucopurulent expectoration. The physical signs bespeak no diminution in the size of the cavity. Is again becoming tired of using the oil; still she says it gives her the most relief. Continuing its use.

CASE II.—John Riley, aged 50, manager at a cotton-mill. About three months before my visit has been suffering from a weight and pain in the left side, with a hacking cough, which occasionally brought up a little phlegm, streaked with blood. His bodily strength has gradually diminished; has not been able to take his accustomed amount of food. Took on his own

account a nourishing food, wine, with an aperient pill, thinking he should find relief thereby, but found his sufferings increased under this treatment. On the 12th September, 1848, I first saw him. Much emaciation of the body and pectoral muscles; dulness on percussion beneath the left clavicle. Pectoriloquy very distinct, with the cavernous râle; distressing cough; expectoration pus, and nearly half a teacupful in the twenty-four hours; hectic. Ordered the temperature of the room to be 60° Fahrenheit, and not to exceed 65°; an infusion of bran with honey as a drink; a table-spoonful of cod-liver oil three times a day, with two drops of lemon juice; three grains of the extract of henbane at bed-time. A liniment of equal parts of the oil and spirits of turpentine to be well rubbed over the chest twice a day.

September 18th. Does not experience much improvement as yet. Patches of flaky mucus appear mixed with the expectorated pus. To persevere.

November 1st. The cavity is now perceptibly smaller; hectic diminishing; pulse 96. The mucopurulent expectoration less by one half, and streaked with blood, tongue clean, and secretions healthy. Ordered him to take a little fowl, and as much beef as he can bear. To continue as before.

January 5th. Has gained 40lbs. in weight since the first of November. Appearance much improved; hectic gone; cannot perceive the cavernous râle, or any entrance of air into that portion of the lung where the cavity was. Some few specks of pus, mixed with a slaty-coloured mucus. Enjoys his food, and wishes for some table beer, which I have allowed.

April 23rd. He is now free from cough or expectoration, and feels, with the exception of debility, perfectly well. Resumes his duties as manager. Discontinues the oil, and allowed any quantity of nutritive food which he can bear, with table beer.

The remaining cases I will be as brief as possible with.

CASE III.—Miss B., aged 22, has been under an eminent physician, in Manchester, and takes the colourless oil, from which she has received no benefit. Tubercles are formed in the axillary region. No cavity or hectic. Began the use of the yellow-brown oil on 5th of November, and continued to use it until the 25th of February, when she lost her cough, and gained in weight. Recommended her to Devonshire for a more genial climate.

CASE IV.—B. G., aged 36, resembles, in every particular, the case No. 1. January 28th began the use of the oil.

April 28th. Hectic much relieved; expectorates more freely; more mucus and less pus. Takes his food better; aphthous ulceration nearly gone. The cavity does not improve. Continuing the use of the oil.

CASE V.—Mr. B. has been under the treatment of an eminent surgeon, and taken the pale oil, and by him pronounced consumptive. December 25th began the use of the oil, and on the 1st of April discontinued it. Is perfectly free from cough. I did not see this case, but was consulted by letter from a distance. This

gentlemen was a friend of the lady (Case 3,) whose cure produced a desire from him to undergo the same treatment.

CASE VI.—Mr. T., aged 24, has been under the treatment of his medical attendant about two months, and gradually became worse. Has not taken the oil; has a large cavity beneath the left clavicle; hectic; aphthous ulceration of the mouth. Began to use the oil on the 26th of January. The temperature of the room to be strictly watched, with the same treatment as in Case 2.

April 26th. Have received word his hectic is diminishing. He improves in appearance. From an examination of the sputa which I have received, there is more mucus and less pus. He continues to use the oil.

CASE VII.—Mrs. J., aged 46, about three months before my visit had influenza, subsequent to which a small cavity of the upper part of the right lung supervened, with hectic. Has now taken the oil about two months, with a diminution of her cough and expectoration. Is improved in strength and appearance. Continues the oil.

CASE VIII.—Mr. J., aged 19, a large cavity in the right lung, and hectic. Has taken the oil about four weeks with some advantage. This is a hopeless case.

CASE IX.—Mr. R., aged 23, with a small cavity beneath the left clavicle, and hectic. Has taken the oil four months, with considerable advantage. The diameter of the cavity diminishes. The quality of the expectoration better, there being more mucus, with a few specks of pus, and occasionally a tinge of blood.

CASE X.—Miss W., aged 20, dulness from the left clavicle to the margin of the third rib; contracted vesicular r  le; troublesome hacking cough, with mucous expectoration, sometimes mixed with blood. Cannot detect a cavity. Has buried a father and three sisters from phthisis. Has taken the oil three months, with considerable relief. Her aspect is much improved. She is continuing the oil.

CASE XI.—Mr. H., aged 39, has a small cavity in the left axillary space. Has used the oil four months. With the exception of a diminution of the expectoration, I see no improvement, either in his appearance, or physical symptoms.

REMARKS.—Case 1 fully exemplifies the palliative effects of the oil in hopeless cases of phthisis. In December, when the oil had produced an apparent influence in mitigating the most prominent fatal characteristics of the complaint, at the urgent request of the patient, it was discontinued. Six weeks elapse, a fatal train of bad symptoms supervene, and she is obliged to resume the use of the oil to prevent an apparent fatal issue, when her symptoms became mitigated in severity, but she does not regain her wonted constitutional vigour. Throughout these periods I watched the increase and diminution of mucus and pus by the aid of a powerful microscope, and found, to my satisfaction, when the system became impregnated with the oil, the pus diminished, and mucus increased.

Nevertheless, no diminution in the size of the cavity took place; she still survives, without any hope of an ultimate recovery. Case 2, from its unexpected successful termination, furnishes a proof of the value of the oil, aided by other means, which no other medicine in my practice ever accomplished. The man had every physical symptom of a tubercular cavity in the left lung; notwithstanding he recovered, after using the oil internally and endermically for five months. The cavity is healed, and he is in the enjoyment of good health, and free from every vestige of a tendency to relapse. He is now heavier than he was before his sickness. Case 3 recovered from tubercular depositions. This case may relapse, and precaution has been used in sending her to a warmer climate to prevent this occurrence. She took the colourless oil under the advice of an eminent practitioner, without any benefit. The yellow-brown s  con produced an improvement. Cases 4, 6, 8, 11, are likely not to be permanently benefitted by the oil. Case 5 I never saw, and therefore cannot say with a certainty whether the case was phthisis or not. Case 7 appears, from her present physical and general symptoms, likely to recover. Case 10 is no doubt one of tubercularisation of the lung. How far her present favourable symptoms may continue, time alone can reveal; delusive hopes may, as they often have been, the ominous harbingers of an ultimately fatal termination in this case. The majority of the cases continue under treatment, the issue of which it would be difficult and impolitic to premise. The only just conclusion to be arrived at is, that the use of the oil has diminished the advent of ulceration, where it had not already taken place before its use; and where the ulcerative process was fully established, it seems to have prevented its further progress. The secretion of pus is substituted for that of mucus when the oil is suspended, and *vice versa*. The most satisfactory proof of its efficacy is, that under favourable circumstances and cases, it does cicatrize cavities. Whether this is suspended action only for a time, to be afterwards developed in a fatal issue, time will be the best judge. I do not think it would be wise to abandon other valuable auxiliaries with the oil. When there is a necessity for leeching, counter-irritation, tartar emetic, or sedatives, it is the bounden duty of the surgeon to conjoin each or every one with the oil, as cases may require. Too great a caution cannot be used in having the temperature of the room where the patient lives as equable and temperate as possible. I have generally adopted from 60 to 65  . Diet also forms an excellent link in the treatment; an infusion of bran, with cream or honey, I have found to agree with patients as a beverage; it combines nutritive with demulcent properties, and relieves the aphthous mucous ulceration in the ulcerative stages of phthisis. Lastly, too much cannot be said in favour of examining the sputa under the eye of a powerful microscope. This instrument reveals the condition of a cavity or diseased bronchial tube as clearly as could be wished; the quality and quantity of pus secreted can be noted as accurately by its powers, and the pathological inference thereby deduced as

correctly as the physical signs furnish to an expert stethoscopist; without it the practitioner cannot measure improvements; it is like the rudder to a ship, or a compass to a mariner; it furnishes ocular demonstration of facts which to unaided vision would, at the best, be only problematical. With these remarks I shall conclude a very imperfect account of the use of cod-liver oil in my practice, hoping the experience of others more competent to judge may reconcile the conflicting opinions of its efficacy into a standard of worth, and that this may confer a boon on suffering humanity.

I am, Sir,

Your obedient servant,

JESSE LEACH.

Heywood, Lancashire,
May, 1849.

Proceedings of Societies.

MEETING OF THE SUFFOLK BRANCH OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

The Anniversary Meeting of the Suffolk Branch of the Association was held at the Town Hall, Hadleigh, on Friday, the 15th of June. The following members were present:—

Dr. Baird, Dr. Durrant, and Mr. Ranson, Ipswich; Dr. Ranking, Norwich; Dr. Bedingfield and Mr. Bree, Stowmarket; Dr. Duncan, Mr. Nunn, Dr. Clarke, and Mr. Waylen, Colchester; Mr. Jones, Melford; Mr. Growse, Mr. Mudd, and Mr. Growse, jun., Hadleigh; Mr. Munn and Mr. Gurden, Boxford; Dr. Kirkman, Melton; Mr. Martin, Holbrook; Mr. R. Growse, Bilderton; Mr. Jeaffreson, Framlingham; Mr. H. L. Freeman, Saxmundham; Mr. Fenn, Nayland; Mr. Rodick, Halstead; Mr. F. Manning, East Bergholt.

At two o'clock the chair was taken by Mr. Growse, who said that he had much pleasure in receiving the members of the Association, at Hadleigh, and felt honoured in being selected to fill the office of President for the ensuing year. He would not occupy their time by any lengthened observations, as there were many communications to be brought before the meeting. He could only assure them that he entered most cordially into the objects of this great and excellent Association, and he should always entertain a most sincere pleasure in furthering its interest to the utmost of his ability. (Cheers.)

Mr. Bree then read several letters from members, who were unable to attend.

Dr. Durrant then read a paper upon "Latent and Circumscribed Pleurisy, with Effusion."

A discussion ensued on the comparative value of the different methods of counter-irritation, in which Mr. Nunn, Mr. Jeaffreson, and Dr. Ranking took part, the opinion of the meeting appearing to be favourable to the use of flying blisters in chronic inflammation of the pleura, instead of either open blisters, tartar-emetic ointment, or croton oil. Dr. Durrant's paper also led to some interesting remarks upon the difficulty of the differential diagnosis in circumscribed pleurisy.

Dr. Duncan then read a most excellent and elaborate paper upon "Tuberculous Deposit in the Kidney." The paper was illustrated by numerous drawings, fresh preparations, and the pathology of this form of disease was well shewn, after the meeting, by various microscopical preparations. An abstract of this paper will be published in the Journal.

Mr. Jeaffreson, of Framlingham, then detailed an interesting "Case of Lithotrixy," which was followed by a paper from Dr. Bedingfield.

Mr. Nunn of Colchester, then read two most interesting cases, in one of which a "puff-dart" was accidentally drawn into the trachea, and in the other a compound dislocation and entire loss of the astragalus occurred.

The last paper read was a most valuable contribution upon "The use of Cod-liver Oil in Phthisis, Tabes Mesenterica, Morbus Coxarius, &c.," by Dr. Clark, of Colchester.

This paper was handed over to Dr. Ranking to assist him in his inquiries upon this subject, and, with the others, will be published in the next number of the Journal.

Dr. Ranking expressed much pleasure in hearing the paper of Dr. Clark. He had taken much interest in the inquiry of the therapeutical value of cod-liver oil in phthisis pulmonalis, and after several years' trial was induced to consider it the very best remedy hitherto brought forward in the treatment of this disease. Dr. Ranking urged upon the meeting the importance of the members of the Association assisting him in his investigations.

Mr. Martin had seen much of the use of cod-liver oil, but he regretted that he, too, frequently lost sight of his patients, as they got their oil at the druggists and treated themselves. He believed it to be a medicine of great value.

Dr. Clark exhibited a specimen of the oil made by himself, by subjecting the liver to a heat of 190 for some hours, and then straining. The preparation was straw coloured and clear. He had tried all the kinds of cod-liver oil, and gave the preference infinitely to that similar to the specimen exhibited. He spoke highly of its remedial effects in *tabes mesenterica*, and hoped much from its use in phthisis pulmonalis in the early stages, though he had no doubt that we should be disappointed if we expected too much from this or any other remedy, in the advanced forms of the disease. Dr. Clark handed round Yonge's elaborate analysis of the various kinds of cod-liver oil.

The following resolutions were then proposed:—

Proposed by Dr. Ranking, seconded by Dr. Baird,—"That this meeting expresses its deep and sincere regret at the great loss which the Association has sustained in the death of its Secretary, Dr. Streeten; and it is desirous of recording in its proceedings the high estimation and respect in which it holds the memory of one who devoted so much of his time and talents to serve the interests of the Association."

Proposed by Dr. Durrant, seconded by Dr. Chevallier,—"That the place of meeting of the Suffolk Branch of the Provincial Medical and Surgical Association for 1850, be at Woodbridge, and that Dr. Kirkman be requested to preside."

Proposed by Dr. Kirkman, seconded by Mr. Martin,—"That the best thanks of this meeting be presented to those gentlemen who have read papers and cases."

Proposed by Dr. Bedingfield, seconded by Mr. Jeaffreson,—“That the Chairman be requested to convey the best thanks of this meeting to the Feoffees, for the use of the Town Hall for the purposes of this meeting.

The Secretary announced the following names for election:—Geo. Cream, Esq., Long Melford; Jeremiah Wase, Esq., Yoxford; Edward Gross, Esq., Earl Soham; — Reed, Esq., Stradbroke.

Mr. Bree then proposed a vote of thanks to the chairman, and the meeting adjourned to the dinner, which was provided with great liberality by the host of the White Lion.

Mr. Growse, the President, was supported by the Rev. Mr. Knox, the Rector of Hadleigh; Drs. Baird, Ranking, Durrant, Rev. Mr. Lloyd, &c. &c.

The following are some of the toasts:—“The Provincial Medical and Surgical Association,” “The President of the Suffolk Branch,” “The President of the Council, Dr. Hastings,” “The Secretary of the Suffolk Branch, Mr. Bree,” “Medical Science all over the world,” “The Hospital Staff of Ipswich and Colchester,” &c. &c.

The meeting separated much gratified with the proceedings of the day, which were marked by great good feeling and unanimity of appreciation of the benefits resulting from a union of scientific and social intercourse.

Foreign Department.

THE CHOLERA IN PARIS.

The first two cases of cholera in the French capital occurred on the 9th of March, but excited no attention, from the belief that they were merely more than usually severe instances of the ordinary form of the disease. But a few days sufficed to put an end to all doubt on the point, by the simultaneous eruption of the disease in several localities, and by the occurrence of a frightful number of cases of diarrhœa. This appeared at first to attack the hospital patients of the metropolis, sixty out of eighty in the Hospital of St. Louis being seized in a single night.

Nevertheless, its progress from this time was slow; no case had occurred in the city, and in the hospital it had only attacked eighteen in a distinctly choleraic form, but of these twelve had died. In spite of this, but little alarm was excited, as the patients were persons previously in feeble health, and who therefore might be expected to succumb, even to a comparatively mild form of the complaint. This comfortable conviction was, however, of short duration.

On the 19th of March the cases treated at the Hotel Dieu, La Charité, and St. Louis, amounted to forty-four, of which twenty-one were fatal. The Salpêtrière had only two cases.

On the 21st most of the hospitals exhibited a few cases, the total number being ninety-six; but after this time the Salpêtrière, which had hitherto almost escaped, was attacked in a manner which almost depopulated it, as will be seen by the following table:—

		Cases.	Deaths.
There were on March ..	21	2	2
“	23	26	13
“	26	101	52
“	28	43	29
“	30	37	30
“ April ..	2	121	92
“	4	8	61
“	6	75	69
“	9	62	48
“	11	55	40
“	13	49	30
“	16	52	41
		712	516

In order to comprehend this great mortality it must be stated that the Salpêtrière contains a population of 5,000, made up of infirm old women and lunatics.

The epidemic had not been so extensively diffused in the hospitals, properly so called. The cases are as follows:—

		<i>Cases.</i>	<i>Deaths.</i>
March	21	85	41
"	23	29	19
"	26	94	45
"	28	66	74
"	30	73	
April	2	73	12
"	4	41	10
"	6	45	20
"	9	86	58
"	11	59	19
"	13	118	34
"	16	82	51
		851	473

In all, taking the indigent population of Paris at 300,000, (those who are treated at hospitals,) the cholera has, in thirty-eight days, carried off 473 out of 851 cases.

Having thus given a succinct account of the number of individuals attacked, we will now enquire what have been the methods of treatment employed. The first circumstance to be noted, viz., a general fact, is, that cholera is preceded, and as it were announced, by a premonitory diarrhœa, to which the name “cholérine” has been applied. This has been treated variously; by rice-water injections, by infusions of aromatic herbs, with or without laudanum. Of opium, all preparations have been given, with about an equal effect.

Phosphoric acid has been given in St. Louis, at first with good effects, but these were subsequently found to be anything but constant. M. Guerin has boasted of his success with emetic doses of ipecacuanha. So much for the cholérine. But if cholera is once established, what is the appropriate treatment? This question the French admit to be as difficult now as in 1832. The medicines employed are the same as in cholérine.

Cholera, as seen in Paris, terminates in one of three ways:—Either it continues its progress, with cramps, cyanosis, and collapse, when all treatment is unavailing; or, secondly, reaction is quickly established, but a state of typhoid depression ensues, and the patient sinks in a consecutive fever; or, thirdly, the disease is suddenly arrested, and the patient passes at once into

rapid convalescence. The principal modes of treatment may be thus briefly stated:—

1. *Sesquichloride of Carbon*.—Given by Malgaigne in three cases. All fatal.

2. *Common Salt in large doses*.—At first great expectations were awakened by the success which followed its exhibition in a few cases, but subsequent experience did not bear out these hopes; nevertheless this medicine appeared in some cases to arrest the vomiting and purging.

3. *Nitrate of Silver by Rectum*.—No beneficial effects.

4. *Chloroform*.—Has not found to answer to the encomiums bestowed upon it in England.

5. *Cold Water externally and internally*.—No success.

6. *Mercurial Treatment*.—M. Serrés, regarding cholera as a pernicious fever, treated it with mercurial frictions. He, however, lost 86 out of 170 cases.

7. *Stachys Anatolica*.—Much vaunted in the east, but found nugatory.

[This terminates the choleraic pharmacy of our Parisian brethren. Without affirming that any one treatment is in the long run more serviceable in this dire disease than another, it cannot fail to strike the reader that the French treatment is meagre, and not guided by just therapeutical principles. They would seem to be unacquainted with several plans of treatment which have had a large share of commendation in this country, such as the saline injections of Stevens, the acetate of lead of Graves, and others. The disease appears to have broken out anew in this country. We do earnestly hope that in their subsequent management of the disease, British practitioners will bring to bear upon it more logic and less empiricism than has heretofore characterised their proceedings.]

ON THE COINCIDENCE BETWEEN THE MODERN TREATMENT OF SOME DISEASES OF THE UTERUS,

WITH THAT RECOMMENDED BY HIPPOCRATES.

To the Editor of the *Provincial Medical and Surgical Journal*.

SIR,

As a member of an Archæological Society of this town, I have felt sufficient interest in the subject to commit the following remarks to paper, which are at your service for publication, should you think fit to insert them in the *Journal* of our Association.

I am, Sir,

Your obedient servant,

EDWARD COPEMAN.

Norwich, June 9, 1849.

It is neither an uninteresting nor a useless employment of an hour to meditate upon the so-called novelties of the day, and to investigate their claim to such an appellation. Every year in the medical, as well as in the general, world, produces its discoveries, alterations, and improvements; some of these, perhaps the

majority, are pure quackeries, originating in the imaginations of designing men, whose object is to secure their own temporal aggrandisement, by playing upon the gullibility of the public. For a time they prevail, and, after effecting considerable mischief, are discovered to be impositions, and die a natural death.

Others are of an epincene character, consisting of something sufficiently true to afford them a hearing, but clothed with a very fictitious value. Another description of novelty is that, which in fact is merely a re-introduction of some practice in vogue ages ago, but which had been forgotten or disused long enough to cause it to appear at first sight original. In endeavouring to account for the re-appearance of ancient methods of treatment as novelties, it is not difficult to imagine that a combination of circumstances may occur at any period, or in any age, which, to minds similarly constituted, may give rise to a similar train of ideas, and lead to like results. This is a very probable, and certainly a satisfactory way of explaining the fact; but there is another, which in some instances, is equally true, although, when acted upon without acknowledgment not strictly honest or honourable. We allude to the conduct of those who, possessing a knowledge of ancient writers, cull from them practical hints, which they publish as productions of their own understanding. The effect of this is not always to be complained of, owing to the occasional value of the practice thus introduced; the surreptitious manner of its introduction is the thing to be deprecated, and, in the present advanced state of education and professional morals, is totally inconsistent with the character and station which members of the medical profession are expected to hold.

As examples of the re-introduction of ideas and modes of practice in existence centuries ago, yet in the present day attracting all the attention of novelty, disseminated too, by physicians, whose position negatives the possibility of their practising dissimulation, we may adduce certain views lately promulgated with respect to torsions and flexions of the uterus, described as causes of disordered menstruation and sterility. Hippocrates, in his chapter on "Diseases of Females," describes these very diseases, as well as their effects and proper treatment. For instance, he attributes certain deranged states of menstruation to occlusion and distortion of the os uteri. "*Morbus fit, si uterorum os conclusum fuerit, aut distortum.*" "*Si enim horum quid fuerit, menses exitum invenire non poterit priusquam uteri ad sanam naturam redierint. Aliquando dum ipsi uteri obtorquentur, etiam os ipsorum distorqueri contingit.*" Again, he speaks of occlusion and distortion as causes of sterility, and advises the very same treatment said to be first recommended and practised by Dr. Simpson, of Edinburgh. "*Si os valde conclusum fuerit, tædis et plumbeis fistulis immissis aperito. Quibus vero os distortum est, et ad coxam allapsum, per digitum avulsam à coxâ detrahito. Quum autem discesserit, tædis et plumbeis fistulis immissis, juxta priorem rationem, in rectitudinem dirigito.*" What is this but the uterine sound? Hippocrates also mentions the os uteri being open "*magis quam oportet*," and its being thick and fleshy, as causes of sterility. Another cause he describes to be a membrane obstructing the os uteri, evidently not referring to the hymen, for his treatment consisted in destroying the membrane, by introducing

lint covered with a stimulating application,—“*quam penitissime, filo ad extremitatem alligato.*”*

It is, at least, curious and interesting to observe how completely modern discoverers have been anticipated, and that the knowledge of these conditions of the uterus was almost as perfect (though probably not so diffused,) 2000 years ago as at the present time.

ON THE CRIME OF SECRET POISONING.

To Charles Hastings, M.D., President of the Council of the Provincial Medical and Surgical Association.

My dear Sir,—The crime of secret poisoning has become so common in this country, that scarcely a week passes in which some instance is not brought before the public, and frequent examples occur of several members of the same family being swept away by this wholesale and easy mode of destruction. My attention has been more especially directed to the subject since the trial and execution of Sarah Freeman, at Taunton, for the murder of her husband, mother, child, and brother. The Town Council of Bridgwater, in which neighbourhood these crimes were perpetrated, at my suggestion, presented a petition to the Legislature, for the restriction of the sale of poisons, and at the same time addressed letters to Sir Robert Peel, and Sir James Graham, entreating their attention to the subject; and I have made a similar application to Sir George Grey, and also presented a petition to the House of Commons to the same effect. Hitherto my efforts have proved unavailing; but the recent and numerous cases of secret poisoning loudly demand that every attempt should be made to put a stop to so dreadful a practice.

I am aware that many difficulties would attend the restriction of the sale of deleterious drugs; but as arsenic is the agent usually employed to effect this diabolical purpose, I shall confine my observations to that poison, which is seldom required for legitimate uses. This mineral may be obtained with very little difficulty at every druggist's, and at many country, shops, under the most frivolous pretences, and can be administered with great facility to its unsuspecting victims, possessing neither colour, smell, nor taste. Other poisons are not so generally known, neither can they be so readily procured, as the mere inquiry for such by those who contemplate murder, would excite suspicion.

I cannot help thinking that a petition to Parliament from so numerous and influential a body as that over which you preside, would rouse the public mind, and command that attention which an humble individual can hardly expect. As I fear it may not be in my power to be present at the approaching Anniversary Meeting, I would beg leave to suggest to you, Sir, as the President of the Council, the propriety of presenting petitions

to the two Houses of Parliament, praying them to adopt such measures as in their wisdom they may devise, to prevent the indiscriminate sale of poisons. Such petitions may be prepared by the Council, and signed by yourself on behalf of the body of members, after having been subjected to the approval of the meeting.

With a view to check the indiscriminate sale of poisons to illiterate persons, and especially of arsenic, I proposed, that as that deadly drug was but rarely necessary for legitimate purposes—

“That no druggist or shopkeeper should be allowed to sell arsenic, under a penalty, without a license.”

“That no person should be able to purchase arsenic under any circumstances, unless accompanied by a witness.”

“That the vendor should be compelled to keep a book, in which he should make an entry of every such sale, to which the purchaser and his witness should affix his name and place of abode, and this should be attested by the vendor.”

Parties could thus be traced and identified. A better plan may be devised; and I merely offer this suggestion in order to engage the attention of others to a subject of paramount importance.

It may be proper here, to advert to the precautionary measures which are adopted by the Government of Austria for this purpose. Wilde, in his “Austria and its Institutions” says—“In this country, the apothecary is solely a compounder of physicians' and surgeons' prescriptions. He dare not, under the severest penalties, prescribe even the most simple remedies, nor perform the most insignificant surgical operations; nay, more, he cannot sell a dose of physic without the written order of the physician or surgeon who is recognized by the university of his country.”

The following are some of the rules concerning the duties of apothecaries, and the composition and sale of medicine:—All poisons are required to be kept under lock and key, and can only be compounded by the head of the establishment. All powerful medicines, as emetics, drastic purgatives, strong mercurial compounds, and all preparations marked X thus in the tax-book, are not permitted to be sold without the recipe of an authorized practitioner. Apothecaries known to sell medicines which might procure abortion, without the order of a physician, are punished in the severest manner. In Austria, both the public on the one hand, and the prescriber and legitimate compounder of medicine on the other, are protected against quacks, mountebanks, patent medicines, wonder-working nostrums, poisonous pills, mineral cosmetics, and the thousand deleterious substances advertised, puffed, and vended, under the name of specifics and panaceas, not only with the permission, but frequently with the authority, of the State in Great Britain. The public prints are not hired to entrap the ignorant and credulous, by lauding empirics and imposters; the public eye is not disgusted by unseemly and disgraceful placards, nor modest females insulted by having indecent hand-bills thrust upon them in the open streets, as occurs daily in this country. Moreover, no one is allowed to sell medicines of any description without a

* Latin translation. Folio edition. 1538. “De Morbis Muliebris.”

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proper education, and satisfactory licence; and the trade of a druggist is, as it should be, confined to the wholesale vending of medicines to apothecaries. England might and ought to take a wholesome lesson from this well-ordered condition of the present state of pharmacy in the Austrian States." I do not apprehend that such stringent regulations would be recommended or tolerated in this country, yet all who give this important subject due consideration must admit that some restraint is necessary.

I remain, my dear Sir,

Yours faithfully,

JONATHAN TOOGOOD.

Park Crescent, Torquay,

June 7, 1849.

Medical Intelligence.

DEATH OF WILLIAM CLIFT, ESQ., F.R.S.

This gentleman, so long and so deservedly well known to the medical profession and the public generally, expired at his residence, Stanhope Cottage, Hampstead Road, on Wednesday, the 20th instant, in the seventy-eighth year of his age. Mr. Clift had held the post of Conservator of the Hunterian Museum of the Royal College of Surgeons for nearly half a century, having been appointed to that office on the purchase of the Collection, by Government, of the executors of John Hunter, whose apprentice and assistant he was for many years, and also a fellow labourer in the formation of that magnificent monument of the genius of his immortal master. Mr. Clift was a Fellow of the Royal Society, and was greatly esteemed by the present and former distinguished savans of that body, particularly the late Sir Joseph Banks, Dr. Wollaston, and Sir Humphry Davy; indeed, so highly did the latter gentleman appreciate Mr. Clift's value, that he used his influence to admit Mr. Clift a Fellow before the increase of the new expensive admission fees, this gentleman being the last admitted on the old scale.—*Lancet*.

DEATH OF RICHARD CARMICHAEL, ESQ., OF DUBLIN.

We regret having to announce the death of this gentleman, by accidental drowning. It appears that the lamented gentleman was proceeding on horseback to his country residence, at Sutton, near Howth, and on arriving at a part of the strand where a stream or inlet of the sea flowed in over the sandy beach, he asked some persons who were at hand if it would be safe to cross there, and being answered in the affirmative, he ventured across, but when more than half way the horse got out of his depth, and after swimming for a little, leaned over, and fell on his side, when the rider lost his seat, and became submerged in the tide. He has left a widow, but no family. He has bequeathed £4,500 to be added to the Medical Benevolent Fund, in addition to £500 given during his life-time; £5,000 in all. To the College of Surgeons he has left £3,000, the interest to be applied to the foundation of prizes

for essays on specified subjects. To the Richmond Medical School he has also left £2,000 the interest to be distributed annually in prizes amongst the students who distinguish themselves; and also £8,000 to be applied in the purchase of ground and erection of buildings.—*Dublin Medical Press*, &c.

THE CHOLERA.

Forty-two cases of this disease are reported in London during the past week, and they appear most of them to be attributed to bad drainage in the neighbourhoods where they occurred, or to want of cleanliness in the houses. An inquest was held on Tuesday on the body of a woman sixty-five years of age, who resided in Griffith's Rents, Bermondsey-street, and who died of cholera after about twenty-four hours' illness. These Rents consist of eleven or twelve houses, and, according to the surgeon's testimony, are only fit to be pulled down. At the backs of the houses are foul drains, overflowing into the yard, the stench from them being very bad. The Inspector of Nuisances had reported the state of the place to the Board of Health, but nothing up to the present time has been done. The medical officer also said at the inquest that this spot is quite a focus of fever. In the provinces the disease is again on the decline. Favourable accounts also are received from Ireland. At Rennes the mortality has been great from cholera. It has also broken out in Silesia, at Vienna, Presburg, Cairo, and Alexandria. In Holland it is on the increase; and, in America, it is spreading with fearful rapidity. In Paris the epidemic is on the decrease, as will be perceived by the following figures:—

June.	Cases.	Deaths in hospitals & asylums.	Deaths in private life.
15	114	97	108
16	86	72	—
17	80	77	—

The returns from the military hospitals are wanting. The total amount is, up to June 17th, for civil and military hospitals and asylums, 11,680 cases, 5951 deaths, and 3639 recoveries. We learn likewise, from a return in *L'Union Médicale*, that the number of deaths for the country, up to the 18th of June, is 18,961 deaths from cholera.

APPOINTMENT.

Dr. Brown, for eight years Physician to the Stanford Infirmary, was lately elected Physician to the Sussex County Hospital by a majority of seventy-four, after the severest contest ever known in Brighton.

TESTIMONIAL TO DR. BIGNELL, OF BARNSTAPLE.

In acknowledgment of his services to the poor of the town and neighbourhood, as physician and principal manager of the Barnstaple and North Devon Dispensary, since its formation in 1832, £50, collected from his friends, in subscriptions limited to 10s. 6d. each, have lately been spent in the purchase of a silver salver and other plate, which were publicly presented to the doctor, in the past month of May.—*Lancet*.

COLLEGE PRIZES.

The Collegial Anatomical Prize, founded by the Council of the Royal College of Surgeons for the best dissertation on a given subject, has been awarded to Mr. Henry Gray, of Wilton Street, Grosvenor Place, a member of the College, and Demonstrator of Anatomy at St. George's Hospital Medical School, for his Essay on "The Origin, Connection, and Distribution of the Nerves of the Human Eye and its Appendages; illustrated by Comparative Dissections of the Eye in the other Vertebrate Animals." And an Extraordinary Premium of Fifty Guineas has been awarded to Mr. Alfred Poland, of Cloak Lane, City, a Fellow of the College, and Demonstrator of Anatomy at Guy's Hospital Medical School, for his Dissertation on the same subject. *The Jacksonian Prize*, for the best Dissertation on "Diseases of the Mammary Gland, Male and Female, and the Treatment thereof," has been awarded to Mr. John Birkett, of Broad Street Buildings, a Fellow of the College, and Assistant-Surgeon to Guy's Hospital.—*Medical Times*.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, June 15th, 1849:—W. Royston Bayldon, Yorkshire; Thos. Carlyle Beatty, Easington, Durham; Thomas James Dunne, Haslar Hospital, Gosport; Alexander Scott Fogo, Dublin; George Samuel Garrard, Tasmania; Horace Crofts Hastings, Turnham Green; Joseph Luke, London; John Denis Macdonald, Berners Street, Oxford Street; Thomas O'Reilly, Virginia, Ireland; George Parker, Brightlingsea, Essex; Samuel Wallace, Carshalton, Surrey; John Wilson, Lower Thames Street.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates on Thursday, June 7th, 1849:—Thomas Carlyle Beatty, Easington, Durham; William Frederick Dix, Long Buckby, Northamptonshire; Geo. Evans, Northover, Somersetshire; Charles Christopher Hayman, Axminster, Devon; Thomas Sutton Ludlow, Leire, Leicestershire; James Gilbert Martin, Camelford, Cornwall; Samuel Standidge Shackles, Hull, Yorkshire.

Gentlemen admitted Licentiates on Thursday, June 14th, 1849:—George Chatfield; George Thomas Jones, Winthall; Edward Edwards Phippen, Wedmore, Somerset; Alfred Puddicombe, Moreton Lampstead, Devon.

OBITUARY.

Died, February 22nd, at the Parsonage, Poynton, Cheshire, Joseph Bellott, Esq., aged 82, Consulting Surgeon to the Stockport Infirmary, House-Surgeon to the Westminster Hospital, London, 1787.

At Penshurst, Kent, on the 3rd instant, in the 49th year of his age, John Pickance, Esq., surgeon, sincerely and deeply regretted.

Lately, at Stockton, Mr. Johnson, surgeon, of Appleton-on-Wisk, late Apothecary of the Stockton Dispensary.

BOOKS RECEIVED.

Report of the Committee of Visitors of the Bedford Lunatic Asylum, to 31st December, 1848. pp. 48.

Thoughts on Pulmonary Consumption. By William Henry Madden, M.D. London: John Churchill. 1849. 8vo pp. 220.

The Laws of Periodic Growth and Development considered with reference to Hygienic, Moral and Intellectual Education. By Lieut. J. A. Walker, HP. 34th Regt. London: Simpkin, Marshall, and Co.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

NOTICE TO MEMBERS.

Gentlemen who have not yet paid their subscription for the current year, or who are in arrears, are requested immediately to forward the amount due to the Secretary or Treasurer of the Association, as the accounts are now about to be made up for the Annual Meeting.

J. P. SHEPPARD,

Secretary to the Association *pro tem*.

YORKSHIRE BRANCH MEETING.

The Annual Meeting of this Branch will be held at the Museum of the Yorkshire Philosophical Society, York, on Thursday, the 28th instant, at twelve o'clock.

W. D. HUSBAND, Hon. Sec.

York, June 8, 1849.

NEWTON BRANCH MEETING.

The Annual Meeting of the Newton Branch of the Provincial Medical and Surgical Association will be held at the Albion Hotel, Piccadilly, Manchester, (opposite the Royal Infirmary) on Thursday, the 28th day of June instant.

Robert Thorpe, Esq., surgeon, of Manchester, in the Chair. The Council will assemble at eleven o'clock, and the Members generally at twelve.

Dinner will be provided at three o'clock. Tickets, including dessert, &c., but exclusive of wine, 7s. 6d. each. The attendance of Members is particularly requested, as the report of the Committee appointed at the last Annual Meeting to revise the Rules, will be brought forward.

Members or friends who intend to dine with the Association, must signify their intention to the Manchester Secretary, Mr. Hatton, 114, Oxford Street, on or before Monday, the 25th instant.

JOHN HATTON, Surgeon, Manchester, } General
G. C. WATSON, M.D., Liverpool. } Secs.

TO CORRESPONDENTS.

Communications have been received from Mr. Nunn; Mr. Humphry; Mr. Alford; Dr. Durrant; Mr. Jeaffreson; Dr. Bedingfield; Mr. Ross.

In consequence of the lamented death of Dr. Streeten, it is requested that all letters and communications be sent to J. H. Walsh, Esq., Foregate Street, Worcester. Parcels and books for review may be addressed to the care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON SURGERY,

DELIVERED IN THE

MEDICAL SCHOOL OF CAMBRIDGE.

By GEORGE MURRAY HUMPHRY, Esq., Downing
College, Surgeon to Addenbrooke's Hospital.

LECTURE X.

MORTIFICATION CONTINUED.

Atonic Mortification; Bed-sores; Gangrena Senilis, Sicca and Humida, Symptoms; Real Cause of the Disease to be found in the Failing Powers of Nutrition attendant on Old Age, aided by an Ossified State of the Arteries,—not Inflammation of the Arteries; Treatment, General and Local; Amputation not advisable; Symptoms preceding the Gangrene; Mortification from deficient supply of Blood, occasioned by Ligature, Injury, or Inflammation of a main Artery; Mortification from Suspension of Nervous Influence; Traumatic Gangrene; Circumstances under which it occurs, and the cause of it, generally associated with Inflammation and Interstitial Suppuration; Symptoms. Question of immediate Amputation where it is likely to occur, and of Amputation where it has set in; Mortification occasioned by Pressure upon an Injured Part; by Ergotted Rye, Fever, and Exposure to Cold; Cases of Mortification without obvious cause.

Of the three classes into which I divided the several instances of mortification, the atonic, or that in which the mortification is associated with an enfeebled state of the system, or of the part affected, includes by far the greater number of cases. In this, as in both the preceding classes, the mortification is, for the most part, preceded by inflammation, and depends upon it as the immediate exciting cause. The peculiarity consists in its being disproportionate in its extent to the severity of the inflammation; and the want of due relation between cause and effect between the inflammation and the mortification, is owing to the low vitality of the structures involved, which renders them unable to bear the disturbance in their nutritive functions occasioned by inflammation. You must bear in mind throughout the consideration of this division of our subject, that the same want of vigour which entails such disastrous results upon inflammation, entails also a proportionate inability to resist the invasion, or to oppose the progress of that disorder when any slight

event occurs to give rise to it. The liability to suffer inflammation, and to perish under its influence, are unfortunately very often associated together, and are to a certain extent proportionate to one another. Patients who are greatly reduced and weakened by disease, are very subject to inflammatory attacks, and the inflammation quickly passes on to suppuration, ulceration, and to mortification. I have already told you that the disposition to these inflammatory attacks is one of the most frequent causes of death after amputation, the chance of their occurrence being greatest in the patients who are most reduced before or after the operation. You have probably remarked that the fatal termination of cancerous and long-continued diseases of all kinds is often hastened by a sudden attack of inflammation in some internal organ, which is found to have occasioned far more extensive disorganization of structure than the symptoms had led us to anticipate. In two cases of cancer of the œsophagus, examined within a recent period, the premature termination of existence was found to have been caused by inflammatory gangrene of the lung, and in neither case had the symptoms during life been such as to excite the suspicion of such an event.

The sloughing ulcers, or bed-sores, as they are called, upon the sacrum, hips, and other parts which chiefly bear the weight of the body, in persons who have been long confined to bed in an enfeebled and emaciated condition, are examples of this atonic form of mortification. The integuments first become red and tender, and then mortify. The sloughs sometimes extend quickly and very deeply, exposing the bones, which exfoliate in scales, or in large masses if the patient lives long enough. These sores form a very serious addition to the sufferings of a patient, and sometimes turn the scale against him, so that in the management of bedridden persons, your attention should be especially directed to prevent their occurrence, which may often be done for a great length of time by care and good nursing. Cleanliness is of great importance; no irritating secretions should be allowed to remain in contact with the skin; the linen should be often changed, and the bed well made. The patient should be induced to change his posture, and to lie sometimes on his side, or on his belly. For various reasons this very often cannot be done; the skin should then be sponged every day, or every other day, and the parts most subject to pressure be bathed with vinegar or spirit and water, or some slightly stimulating fluid, so

as to harden the skin; this is better than covering it with plaster. The exposed regions should also be relieved from pressure, so far as it can be done, by placing pillows under the neighbouring parts. The water-bed is a very valuable resource, and a great comfort to the patient. When the inflammation and sloughing has commenced, I think a bread and water poultice, to which some lead lotion has been added, answers better than anything I have tried. After the sloughs have separated, simple ointment or water dressing, or stimulating lotions may be used. The sores are often long in healing when they are deep, and particularly so when exfoliation of bone has taken place. In some diseases, where the powers of the patient are much depressed, these sloughs form and spread with great rapidity; thus, in the low stages of typhus fever it is necessary to watch very closely and examine the back daily, so that you may take the hint afforded by the first blush of inflammation, and place the patient upon a water-bed before the mortification sets in.

The most striking instances of mortification resulting from a feeble state of the nutritive forces, are those in which it affects the lower extremities of old people. *Gangrena senilis*, which is the name given to this affection, is generally preceded by inflammation. The inflammation, it is true, is often of little severity, so slight as scarcely to attract attention till the dark colour of the part shows the formidable results produced by it. In other cases, however, it forms a more striking feature in the complaint, and may be distinctly recognized as the immediate cause of the mortification. An old man, who appears to be in the enjoyment of his usual good health, suffers slight inflammation of a toe, induced, perhaps, by a scratch in cutting a corn, the pressure of a tight shoe, or other trivial cause. It gives him no great inconvenience, but does not subside; it lingers about the part, and extends to the other toes and to the instep, causing redness and swelling, but, it may be, no great pain. He contrives to hobble about, does not think very much of the complaint, and his sight being indifferent, he does not observe the change of colour which is taking place at the toe first affected. This part becomes livid, the cuticle vesicates and separates, a thin bloody fluid oozing from beneath it, and the skin under the detached cuticle is seen to be dark and excoriated. The change of colour gradually follows the inflammation as it advances to the other toes and to the instep, and the one preceded by the other, and joined to it by various intermediate shades of blue, livid, and white, causing a peculiar mottled appearance, may spread over the foot and up the leg. The rapidity with which the affection advances varies much. It is not generally very quick, and the change from inflammation to mortification taking place in a gradual manner, without any great struggle, is not attended by a severe shock to the system. There are no symptoms of alarming depression, such as occur in the cases of more acute gangrene; but the old man gradually becomes weaker, is kept awake and made restless by the pain, which, though slight at first, is often severe and constant during the progress of the

mortification. At last he falls into a dozing half-conscious state; the mortification follows more quickly upon the advancing inflammation as the bodily powers decline, but the pain occasioned by it is less severe; some slight additional cause, such as a cold, a diarrhoea, or an attack of erysipelas occurs to disturb the balance still more, and the old man generally dies within a few months of the first appearance of the mortification. Sometimes the progress of the disease is much more rapid. I remember the case of a woman, aged 75, in whom the mortification, commencing in the toes, extended nearly up to the knee in three weeks, and proved fatal soon after.

It occasionally happens that the mortification is preceded by scarce any of the usual signs of inflammation, taking place without any apparent exciting cause, and the mortified part then dries up, and becomes black. Any old man finds a black spot upon one of his toes, or upon his heel, and the skin at the part becomes dry, shrivelled, and hard, as well as black. He thinks little of it, and possibly the slough may separate, and the wound may even granulate and heal up; but more commonly, the mortification extends, or another black spot appears near the cicatrix left by the healing of the former one, the whole toe becomes black, dry, and shrivelled, and the mortification spreads up the foot, or abscesses form in the foot and leg, preceded by very little inflammation or pain, discovered for the most part accidentally, and containing thick bloody *fœtidus*. The patient becomes gradually weaker, and dies of exhaustion. Although the black spot, which is the first symptom of this affection, may seem a slight affair, and being attended with little or no pain, may be disregarded by the patient, it is an ominous fact, for the disease generally takes the fatal course which I have described. Mortification, taking place in this manner, preceded by very little inflammation, and attended with the formation of a dry black eschar, is called *gangrena sicca*, in contra-distinction to the *gangrena humida*, where the mortification is preceded by more obvious signs of inflammation, and the part being soft and moist, is more subject to decomposition, and the formation of gases in its substance.

Senile gangrene affects chiefly persons in the upper classes who have lived freely, and it is, therefore, observed more frequently in private practice than in hospitals. It is essentially the disease of old age, and I think the cause of the complaint is sufficiently found in that failure of the nutritive powers, which, increasing with advanced years, shows its effects throughout the system in the general wasting and degeneration of structure, and which at length renders the lower extremities unable to support their vitality when any disturbing influence occurs to interfere with their nutrition. That the lower extremities should be so much more liable to suffer this mortification than the other parts of the body will cease to be a matter of surprise, when we reflect upon their late development, their distance from the central organs which supply the pabulum, and, to a certain extent, also, the stimulus of nutrition, the comparative feebleness of their circulation, and their liability to the other effects of inflam-

mation, to suppuration, and to ulceration. Surely the chronic gangrene which affects the toes and feet are no more remarkable than the chronic ulcers which affect the legs of elderly persons. I do not mean to say that the failure of the nutritive powers in the lower extremities is the only cause of senile gangrene, but that it is the chief and predisposing cause, which may be assisted by an ossified state of the arteries, or a varicose condition of the veins, and may be brought into immediate operation by a bruise or scratch, or a spontaneous inflammation. Though essentially the disease of old age, and not often suffered before 60 or 70, senile gangrene may occur in persons much younger in reality, but who are, as regards real bodily vigour, prematurely old, in persons who have lived hard, or worked hard, and so worn themselves out before their time, or whose bodies are constructed with less than the average of enduring power. One of the worst cases of mortification of the toes Sir Benjamin Brodie ever witnessed, connected, as he says, with what might truly be considered old age, occurred in a man of six and thirty, worn out by the operation of bad habits upon an originally bad constitution.

An ossified condition of the main arteries of the affected limb, and throughout the system, is generally associated with senile gangrene. The vessel at the wrist, as well as in the thigh, may be felt to be of large size, firmer than natural, and knotty. When examined under such circumstances, the coats of the arteries are found to be thick, to have lost their elasticity, and to be studded more or less closely with opaque spots and plates of earthy matter, which sometimes protrude into the interior of the vessels, retarding the current of blood in them, and may even occasion complete obstruction. This hinderance to the flow of blood through the great arterial trunks must necessarily have much influence in predisposing the parts supplied by them to mortification, and is, in all probability, in a few cases, the direct, as well as the predisposing cause. When this happens, the mortifying part being deprived of its proper supply of fluid, appears generally to become dry, or mummy-like, presenting the appearances which I mentioned in speaking of *gangrena sicca*.

I should tell you that the mortification in these and some other cases, is, by some of the French pathologists, attributed to inflammation of the arterial tubes taking place in their larger branches, or in their minute ramifications, which leads to the coagulation of the blood in them, and to suspension of the circulation in the parts supplied by them. The arguments adduced in support of this view, are, the severe pain sometimes preceding the mortification, which is supposed to depend upon the inflammation in the arterial coats, and the coagulated condition of the blood found in the arteries. With regard to the pain, there is no more reason for supposing that it depends upon inflammation of the arteries than upon the altered state of any of the other tissues in the part affected. The pain is not generally felt in the course of the arterial trunks more severely than in other directions, and it is to be remarked that severe pain has not been observed to be by any means a common symptom in the well marked cases of arteritis

which I have seen recorded. In some there was a dull aching pain, with tenderness in the course of the artery, and in others, the first symptom which attracted attention was uneasiness in the limb, or numbness of the foot, which was followed by mortification. Moreover, the coats of the arteries in cases of *gangrena senilis* do not generally present any decided evidence of the effects of inflammation. They may be stained of a deep red colour from transudation of the colouring matter of the blood, but this is often observed in the examination of bodies, and is known to depend more frequently upon an altered state of the blood than upon an inflamed condition of the arterial tubes. The coagula contained in the arteries are sufficiently explained, according to the views of the old surgeons, by the obstruction to the flow of blood through the mortified part. The mottled coagula frequently found in the branches of the pulmonary artery leading to apoplectic portions of the lung, in which the capillary circulation is stopped by the effusion of blood into the pulmonary tissues, are formed in the same manner; and in their appearance, and in the adhesions they acquire to the lining membrane of the vessel correspond very closely with the coagula, discovered in the arteries of a mortified limb.

You must not imagine that these views respecting the cause of the mortification are matters of indifference in a practical point of view, for you will find the treatment which different surgeons adopt in this affection is regulated rather by the views they entertain of the pathology of the disease, than by the results of experience as to the advantage of any particular course. Dupuytren, inclining to the theory which refers the mortification to an inflamed state of the arteries, employed general depletion. Cruvelhier, observing the great benefit derived in phlebitis from the application of a few leeches over the inflamed veins, pursued the same treatment for the arteritis which he supposed to precede and occasion the mortification, but he does not speak in high terms of the result of his practice; he says that the cases thus treated do not appear to have done better than others.

If the view which I have taken of the pathology of this complaint be correct, the greater number of the cases of senile gangrene can scarcely be said to come within the range of treatment for any curative purpose, inasmuch as the primary cause of the disease is the natural decay of the system. We must content ourselves with endeavours to prop the failing fabric and stay a little the ravages of the disease. Even this we are often unable to accomplish, for the patient is sometimes feverish and cannot bear our cordials, or he is restless and will not follow our directions. The treatment must vary according to circumstances, particular reference being had to the amount of inflammation which precedes the mortification, as well as to the general condition of the patient. When the local inflammation is acute, and the constitutional symptoms such as usually accompany local inflammation, mild depletion by means of aperient salines and a low diet will form the best means of arresting the progress of the disease. But it more generally happens that the con-

stitutional symptoms accompanying senile gangrene give evidence of depression at least as strong as those of excitement, the patient is restless but very weak, the pulse may be quick but it intermits, and you must take care not to mistake the feel of the thick firm coat of the old man's artery for that of the hard pulse of inflammatory fever. When inflammation is slight and the symptoms of depression predominate over those of excitement, the skin being cold and moist, the tongue moist and tremulous, and the eyes sunken, a stimulating treatment, with nutritious diet and wine or ammonia are necessary. This being more particularly the case in proportion as the mortification is in the rapidity of its progress disproportionate to the severity of the inflammation which precedes it. The food and medicines must be regulated with much discretion, for fear of offending the stomach and exciting diarrhoea, whereby the progress of the disease is much accelerated.

When the affection is attended with much pain, restlessness, and inability to sleep, the greatest comfort is sometimes derived from the administration of opium, in doses varying from half a grain to a grain, two or three times a day. It now and then happens when the mortification has been induced by some extraneous cause such as destitution, exposure to cold or injury, that a change of circumstances, comfortable lodging, the warmth of bed, and good food will arrest the disease, the slough will separate, and the wound heal up. During the winter before last there were in the hospital two cases of mortification of the great toe commencing under these circumstances, and both the patients got well and left the hospital cured. Neither of them were very old, and one is since dead of a disease of the œsophagus.

The local treatment consists in raising the limb, keeping it warm, and preventing injurious pressure and friction. The two last objects may be sometimes attained by wrapping it up in carded cotton, which should be changed every two or three days. Poultices seem often to afford the greatest comfort; and disinfec-ting agents, such as charcoal or chloride of lime, or mild stimulating fluids, such as a solution of sulphate of zinc, may be occasionally added. Do not let the inflammation which precedes the mortification induce you to apply leeches upon the inflamed part. I remember a case of the kind, where the inflammation and the pain being unusually severe, the surgeon was induced to place some leeches on the foot, and each one of the leech-bites became a centre from which the inflammation spread. Indeed, the disposition to mortification in the lower extremities of elderly persons constitutes a serious objection to the application of leeches to those parts under any circumstances.

The majority of surgeons are strongly opposed to amputation in these cases, because the operation is found to accelerate the fatal termination in the greater number of cases, and this result of experience is no other than we should have been led to anticipate from the circumstances under which the mortification occurs. The stump generally sloughs, or it does not heal, abscesses form in it, or bleeding takes place in consequence of the diseased state of the arteries not per-

mitting the ligatures to be applied securely; in short, it is found that the chances of recovery, when the case is left to nature, are greater than when amputation is performed; we must therefore content ourselves with endeavouring to assist nature in her efforts to separate the putrid mass when the mortification has stopped, by cutting through the bones and tendons which are slowly detached by the ulcerative process, and in doing this we must be careful not to injure the living textures, for fear of exciting fresh inflammation and mortification in them. Even by this operation we merely remove the dead mass, but do not actually relieve nature of any part of her work, for the process of ulceration continues to proceed through the fibrous tissues and bones in or near the line of separation previously established; and if the patient lives long enough, fragments of bone and tendon are detached above the point at which the knife and saw were applied.

Senile gangrene is often preceded for several months by some uneasy sensations in the lower extremities, such as numbness in the feet, and cramps in the legs at night, or the lower extremities are with difficulty kept warm, and the patient experiences an unusual feeling of being tired in the legs after slight exertion. I have been occasionally consulted by elderly persons suffering these sensations, and have recommended them to wear soft warm stockings of worsted or angola, and easy shoes, to rest the legs at times during the day by laying them upon the sofa, and when there was no contra-indication, to improve the diet by a little more meat, and an extra glass of wine.

One of the most common causes of mortification in early life, and in the adult, is a deficiency in the supply of blood to a member, consequent on some injury or disease of the main artery. It may result from an aneurism or other tumour pressing upon the artery, or from the application of a ligature for the cure of aneurism. I remember a man whose toes had sloughed after the ligature of his femoral artery, by Sir Astley Cooper, on account of popliteal aneurism, many years ago; the toes separated, leaving a stump of the metacarpal bones, over which the skin cicatrized. And I have seen the whole foot and leg, and part of the thigh, mortify after the femoral artery had been tied a little below Poupart's ligament, on account of an aneurism high up in the thigh. The same thing may follow an injury to a limb involving the main artery. Not long ago there was a man in this hospital with mortification in one foot and leg, occasioned by severe contusion of the ham, attended, as it appeared, with injury of the popliteal artery. I remember the case of a lad, in St. Bartholomew's Hospital, in whom the femoral artery was injured by an omnibus falling on his thigh; the foot and leg were at first cold and pulseless, but afterwards recovered their temperature, and retained their vitality, with the exception of the tips of the toes, which became black and dry. In course of time the sloughs separated, and the ulcers healed. When I was dresser at the Norwich Hospital, a man was admitted with fracture at the lower part of the femur, the leg and foot being cold and pulseless. A heavily-loaded cart had passed over the thigh. The limb became greatly

swollen, livid, and vesicated, mortification taking place. Amputation was performed on the sixth day, the patient having been unwilling to submit at an earlier period, and the femoral artery and vein were found torn through, just opposite the fracture at the point where they pass through the tendon of the triceps muscle. One of the surgeons in the consultation upon this patient mentioned a similar case, in which the limb vesicated and sloughed, and on amputation being performed at the end of six weeks, the femoral artery was found pressed upon by the broken bone and obliterated. Sir Benjamin Brodie, in his "Lectures on Pathology and Surgery," relates two cases in which it is probable that mortification of the lower extremities was occasioned by inflammation of the arteries. In neither instance was there any swelling of the limb or vesication, the mortified parts becoming dry. In one case the *post-mortem* examination showed marks of inflammation everywhere about the principal artery and vein of the limb; and in the other, which terminated more favourably, the slough separating, and the stump healing, the mortification was preceded by pain and tenderness in the course of the femoral artery. I do not recollect an instance in which mortification was clearly attributable to inflammation of a vein.

You are aware that the influence of the nervous system upon nutrition is not so direct as that of the circulation, and you will not, therefore, expect that the suspension of nervous supply will have so obvious an effect in producing mortification as the ligature or injury of the main artery of a limb. Nevertheless, it is sufficiently certain, that parts whose nervous function have been impaired by injury or disease, are particularly prone to inflammation; and further, that the inflammation in such parts very quickly passes on to mortification. The rapidity with which sloughs form upon the nates and lower extremities of persons suffering under paraplegia, especially when the paralysis results from injury of the spinal cord, is an instance of this. It is necessary that you should be well aware of this circumstance, and you should watch these patients closely, for, unless you do so, large sloughs will form before you suspect there is anything wrong. Mortification has been known to begin in the ankle within twenty-four hours of an injury of the spine. The inflammation and speedy destruction of the eye, which follows division of the fifth pair of nerves within the cranium, and the well-known fact that mortification may be induced in a paralysed part by exposure to a temperature which would have no injurious influence upon a sound member, are additional illustrations of the liability of a member to lose its vitality under a slight amount of inflammation when its nervous functions are impaired.

The mortification of a limb, then, may be induced by an injury which renders the main artery impervious, or causes a suspension of nervous supply. It may be occasioned at once by the severity of the injury annihilating the vital properties of the part; and it may also be caused by the shock of an injury, which, without at once destroying the vitality of the limb, produces such an impression upon it, that it soon falls into a

state of gangrene, perhaps during the reaction following the injury. The term traumatic gangrene is applied to mortification taking place in this manner, after an injury which has not been attended with the immediate destruction of the life of a part, or with laceration of the great arteries and nerves; and it may be worthwhile to enter a little more fully into the circumstances under which this kind of mortification takes place. When speaking to you in a former lecture of the simultaneous occurrence of abscesses in various parts of an injured limb, as well as in the more distant organs of a patient who had suffered any severe accident, I endeavoured to explain their occurrence by the supposition that the impression or shock of the accident had been propagated from the injured part through the limb, and, in a greater or less degree, through the entire system; the depressed condition of the nutritive and circulatory forces so induced being favourable to the appearance of inflammation and the formation of abscesses. I said, moreover, that the same condition sometimes induced mortification, and that mortification and the formation of abscesses, thus depending upon the same cause, often went on together at different parts of the same limb. Both seem to occur during the reaction, or the attempt at reaction, following the injury—both are preceded by more or less obvious signs of inflammation, and both extend at times for a considerable distance from the immediate seat of the lesion. In a case of severe injury, it not uncommonly happens that the vitality of one part of the limb is destroyed in the first instance, that the adjacent part falls subsequently into the state which is called traumatic gangrene, while suppuration, circumscribed and interstitial, is taking place in the more distant regions; and it is most probable that the immediate death, and the subsequent mortification and suppuration, are the result of the same shock, operating with different degrees of violence upon the near and more remote parts of the limb.

The following case, which may be in the recollection of some of you, will illustrate the subject of traumatic gangrene:—A healthy lad was admitted into the hospital with severe contusion of the left ankle; and a wound, through which protruded the torn belly of the long flexor muscle of the toes. It was not certain that fracture or dislocation had taken place, and the accident was not supposed to be of so severe a nature as it afterwards proved. It was occasioned by a loaded railway truck passing over the ankle. The limb was lightly supported with splints, but the boy complained of a great deal of pain, became restless and delirious, and when the splints were removed on the morning of the second day, the foot was cold and livid, the ankle and lower part of the leg swollen and dark coloured, and a dark bloody fluid, with air bubbles, issued from the wound. The upper part of the leg was hot, swollen, and of a dusky reddish-brown colour; and this colour, with some swelling extending above the knee, was gradually lost in the thigh. The boy had a flushed anxious face, quick sharp pulse, and hot skin. When we met in the afternoon for the purpose of removing the limb, the dark colour had extended nearly up to the knee, and the swelling, with the dusky hue, had advanced further

up the thigh. The lad was weaker; his countenance sunken; he was muttering deliriously; indeed, his condition, was such, that we dare not proceed with the operation. He lived a few hours longer, during which the whole leg became quite black, but the inflammation did not extend much higher in the thigh. After death the ankle was found to have been dislocated inwards, the fibula was chipped at its lower end, and there was a good deal of laceration of soft parts. The tissues of the gangrenous limb near the knee were infiltrated with pus, and there was serous infiltration into the thigh. The tibial arteries were not injured, but distended with mottled coagula, such as are often found in the vessels of a mortified limb.

In the case which I mentioned to you on a former occasion, a strong healthy man, aged 23, received a contused wound of the thumb, with fracture of the metacarpal bone of the forefinger, from a heavy bar of iron falling upon the part. The bellies of some of the muscles forming the ball of the thumb were torn and presented in the wound. He was placed in bed, the hand raised upon a pillow, and lint applied to the wound. Nothing particular attracted attention till the second day, when the wrist was found to be swollen and dark coloured, the hand cold, the forearm swollen, and of a dusky colour, and the man very restless, and complaining of intense pain. On the next day the wrist and lower part of the forearm were gangrenous; dirty fluid, with fetid gases, bubbled through the wound; the dusky redness and swelling had extended up the arm. On the fourth day the mortification and the inflammation had not advanced very much further. Amputation was performed just below the shoulder. Several of the metacarpal bones were found to have been dislocated from the carpus, and chipped at their articular ends, so that the wrist-joint was freely opened, and the cartilages were stained of a bloody colour. There was interstitial suppuration among the muscles of the forearm, and serous infiltration into the arm. He subsequently suffered, as I before related to you, from the formation of abscesses in various parts of the body, and died about ten weeks after the operation.

I have also before alluded to the liability of the stump to slough when amputation has been performed within the range of the severe shock of an accident, attended with much contusion of soft parts,—that is to say, the same condition of a limb which leads to the extension of traumatic gangrene above the seat of the injury, would, in all probability, occasion the stump to slough, if amputation be performed within a given distance. For instance, in the lad whose case I have just related to you, where traumatic gangrene following an injury to the ankle, spread up to the knee. Had amputation been resorted to below the knee in the first instance, although there was no appearance of any injury above the ankle, it is most probable that the stump would have sloughed. This view of the matter is founded upon the observation of several instances in which sloughing stumps and interstitial suppuration in the limb have followed amputation for severe railway injuries.

Traumatic gangrene does not, I believe, often take

place, unless there has been compound dislocation, or some severe injury, to a joint; such, at least, was found to have been the case in all the instances which I have seen. We have had several severe compound fractures, occasioned by railway carriages, and some of these have been followed by extensive sloughing of the contused soft parts, but I do not remember any in which traumatic gangrene occurred to the extent I have described in the two last mentioned cases, unless a joint were implicated in the injury.

The liability to this formidable event, in cases of compound dislocation of a joint, which has been occasioned by such a force as results from the wheel of a railway carriage passing over a limb, should be borne in mind in considering the question of immediate amputation. You should remember that the mortification is likely to extend beyond the seat of the injury, and that the dusky inflammation, with interstitial suppuration, which generally precedes the mortification, will extend to a much greater distance, the patient at the same time becoming feverish and delirious, so that the chances of recovery after amputation may be much diminished by the delay of a few hours. If it be evident that amputation will be required, it should be done at once, for the risk of the operation is much increased when gangrene has set in, and it should be performed at a considerable distance from the injury, otherwise the stump is likely to slough. I must confess, that when the construction of the railway in this district was commenced, I was not prepared for the formidable events ensuing upon injuries, which did not at first sight appear to be so very severe, and I had reason to regret that immediate amputation had not been performed in some cases, and in others, that we had been too scrupulous in endeavouring to save as much of the limb as possible. When gangrene has once set in, amputation affords the best chance, and it is not necessary to wait till the mortification has stopped, and a line of separation been established, for cases have not unfrequently done well where the operation was performed while the gangrene was in progress, and where the divided parts were swollen from the infiltration of serum.

It is well that you should bear in mind that the occurrence of gangrene, after an accident, may be occasioned by the injudicious employment of pressure. I remember a lad who had simple fracture of the forearm, not attended with much bruising or other serious complication, so far as we could learn. Splints were applied and secured by a circular bandage passed many times tightly round them. The lad suffered very intense pain, but the bandage was not removed for several days, when mortification of one side of the forearm, including great part of the ulna, was found to have taken place, and amputation was in course of time performed just below the elbow. I believe the practice of applying moderate pressure, with or without splints, to fractures, and indeed to injured parts generally, immediately after the accident, is a good one, and is found to afford relief to the patient; but to render it a safe practice, two precautions are necessary; first, the bandage should not be very tight;

and, secondly, it should be removed or loosened as soon as the pain is found to increase, or the patient to become restless.

There are other circumstances under which mortification may take place. Persons who have been fed on rye containing ergot are said to be liable to mortification of the extremities, and you will read of the same thing taking place in some of the low fevers. A few months ago there was a man in the hospital with mortification of the toes, which had taken place during fever. When the sloughs had separated the granulating ends of the bones projected a good deal on the face of the stump, so I performed amputation through the middle of the metatarsus, but the wound was a long time in healing, and the foot remained swollen when he left the hospital.

Mortification may ensue from exposure to cold, the intensity of the cold being sometimes so great as to freeze or kill the part outright. Commonly there is a stage of reaction, more or less approaching to inflammation, following the depressed state to which the vital powers of the limb are reduced by the cold, and that reaction terminates in mortification. It is probable that the cold operates much in the same manner as the shock of a severe accident, by lowering the vital powers of the limb, and rendering it liable to reaction, to inflammation, or to mortification, according to its intensity or the length of time during which it is applied. We observe this reaction in a slight degree in our own persons when we pass from the cold air into the warm room, the skin becomes red, and the glow, as it is called, is attended with rather an agreeable sensation. When the cold has been more severe the reaction is also more acute, and may be attended with pain or may even pass on into distinct inflammation. When the depressing influence has been carried further still, the attempt at reaction may be productive of mortification, or the vital energies of the part may be so enfeebled that the inflammation following the reaction quickly runs on to mortification. The more sudden the reaction the more likely it is to produce these disastrous results, so that the best means of regulating it, and the safest mode of restoring a chilled limb, is that which raises the temperature most gradually. We have not much experience of such cases in this climate. In Russia and other northern countries, where they are of more frequent occurrence, the common practice is to rub the part with snow till the temperature is somewhat restored; and in the memorable campaign of the French army in Russia, many of the soldiers' limbs were by this treatment, and by careful management, restored, after they had been for some time completely deprived of sensibility by the cold.

I have seen a few cases in which inflammation was attended with very severe pain, and terminated in mortification without there being any very obvious reason for its so doing. A middle-aged man, of rather unhealthy appearance, was admitted into St. Bartholomew's Hospital, with mortification of all the fingers and the thumb, as far as the metacarpal bones of one hand. The attack appeared to have commenced as one of gout, to which he had been liable for several years.

The pain became unusually severe, and the fingers one after the other turned blue and mortified. He used to obtain some relief from the severe pain by keeping the hand in cold water, but it did not appear that this was the cause of the mortification. A line of separation took place, the sloughs were detached and the stumps healed.

In the month of October, 1846, I saw with Mr. Hammond a thin delicate female, who had a haggard anxious expression, and had been kept awake for six nights and days with intense burning pain in the tips of the fingers and thumb of the right hand. She could not bear the slightest pressure upon them, even a soft warm poultice was intolerable. The fingers were therefore kept exposed to the air, except that she sometimes obtained a little relief by dipping them in cold water, to which laudanum had been added. The pain was increased when she laid down, so that she constantly sat upright in bed, and occasionally fell asleep in that position, but was soon awake by the pain. The tips of the fingers were cold, a little swelled, and of a dusky colour. The rest of the hand retained its natural temperature, and the arteries at the wrist beat as forcibly as on the opposite side. She had been keeping a public house in Cambridge for three months, and during all that time had been out of health, subject to frequent numbness of both hands, particularly of the right, and had been much employed in washing out the drinking glasses with cold water. Two weeks before I saw her she had been seized with an attack of giddiness and numbness felt all over her. This had been relieved by cupping, purging, &c., but the pain in the tips of the fingers commencing at that time, had been constantly on the increase. Soon after my visit she was attacked with paralysis of the left arm and leg. An incision made into the right forefinger gave vent to some pus, but the pain was not relieved till the tips of the fingers mortified, which they gradually did, becoming dry and black. A month after I first saw her the tips of the fingers were black, shrivelled, and mummy-like, with a commencing line of separation between the dead and living parts. There was some redness of the fingers and hand, with slight burning pain and more severe itching at the roots of the fingers and the palm. The thumb, which had been less severely affected than the fingers, had nearly recovered its natural condition without any mortification. The dead parts sloughed off in the course of time and the stumps healed.

I will relate to you another case which happened close to this hospital, where the mortification, also occurring in the upper extremity, was much more severe, and equally doubtful as to its cause. A fine healthy woman, aged 50, was apparently quite well on the 19th of December, 1846, enjoyed a good night's rest, and on the morning of the 20th observed a sensation of numbness in the right hand, with some stiffness in the fingers, and soreness of the end of the thumb. During that day and the following night the part became painful. On the 21st the affection was thought to be of rheumatic nature by her medical attendant, who prescribed warm fomentations and some aperient medi-

cine. The pain increased to an intense degree, so that she resorted to various measures to allay it, such as hot salt, warm and cold water. On the 22nd a dull red spot appeared on the ulnar side of the root of the little finger, and another on the fore-part of the wrist, and there was some swelling about the wrist. Eight leeches were applied, and a grain of opium given every six hours. She could not endure poultices, but preferred cold applications, cold water giving her more relief than any other thing. On the 23rd a bulla appeared upon the red spot at the root of the little finger. On the 24th the hand, wrist, and fore-arm were swollen and hard, the hand rather cold, but the pain not so severe. I saw her for the first time on the 25th, and found her talkative and delirious, with pale anxious countenance, skin moist, pulse 120, feeble, and intermitting. The fore-arm and arm, up to the shoulder, much swollen, very hard and knotty, with a slight dusky hue on the skin. The hand and fingers were less swelled, but they were cold, livid, and devoid of feeling. The prostration quickly increased, hiccup followed, and she died on the morning of the 26th. On examination, the swelling had extended from the upper extremity to the adjacent coverings of the thorax. The hand and wrist were gangrenous, gas being generated in them, and the tissues stained of a livid colour. Serous infiltration had taken place into the deep as well as the superficial tissues of the fore-arm and arm. There were several diffused dark patches in the muscles, looking as if they had been bruised, and interstitial suppuration had taken place in them at various parts. The subclavian, as well as the great vessels of the arm and fore-arm, showed no sign of disease, and contained fluid blood. The large nerves also appeared to be healthy. There were a few dusky vesicated spots in the skin of the fore-arm and arm.

The mortification in this case resembled much the gangrene following a severe injury; it was rapid in its progress, attended with great swelling and severe pain, and with interstitial suppuration of the limb where the mortification was not complete. Though I made careful inquiry, I could not ascertain that she had suffered the slightest injury, not even a prick or a scratch; neither could I discover any cause for this sudden and severe gangrene.

You have, doubtless, remarked the peculiarity of the pain in each of these three cases; it was very intense, forming indeed the prominent feature in the early stage of the complaint, and not ceasing till the mortification had taken place. It was increased by pressure and warm applications, and relieved only by cold water.

There are many other interesting points connected with the subject of mortification, but time will not admit of our entering further into them.

ON LONGEVITY.

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(Read before the Leamington and Warwickshire Medical and Surgical Society.)

Were I to introduce this paper on longevity by a definition of life, or an account of the functions by which it manifests itself, I should find that any such definition or general account, however brief, attempting to explain the variety of forms and degrees, under which vitality presents itself, would lead our attention too far away from those observations on which I desire to concentrate your attention, as leading to original, or hitherto, neglected views, of the important subject of the *prolongation of human life*, by demonstrating that its shortening in the beginning, was from moral causes exclusively.

We find a living principle in all organized bodies certainly, and in some bodies, the organization of which escapes the cognizance of our senses. We find it in animals and vegetables; we may perhaps even admit its existence chemically and geologically; we find it in the ovum, in the fœtus, as in the adult. It varies in its circumstances as in its effects; and although it may appear to us to be derived from, in some cases, other living bodies, in others to be spontaneous or self-derived, it must in all be originated in the *ever-breathing will of the first cause*. Any attempt then, to define the living principle, would be impossible, without limiting, qualifying, and excepting the explanatory circumstances belonging to it, to so great a degree, as to become tiresome, if not unintelligible. Therefore, without attempting any definition, we may safely affirm, that to prolong life is one of the first feelings of our nature, and for which the reasoning *prospective feeling* appears to be especially given to mankind.

It may be observed that most animals, which are born with their natural qualities far advanced towards completion, are enabled to preserve their lives instinctively; but that man, who is so much their superior, can only do so by a continual exercise of his reason, and that if mere natural ability to preserve life in his offspring, were to be the test of his wisdom, man, unaided by experience and educated skill, would rank under the lowest animals. His race would become extinct; and as this self-preserving knowledge is necessary to civilized man, there arises a greater necessity for its cultivation, in proportion as mankind become artificial, and abandon the simple and more nearly animal life of the earlier stages of civilization.

The children of the affluent, in cities where intellect and all the arts, which we chuse to call civilization and fashion, much abound, are at least twenty per cent. shorter-lived than the children of the same class in the rural districts. It appears from the report of the Board of Health, that at Manchester, the average length of life is nineteen years, and in the purely agricultural life of the same class in Rutlandshire, where there are no manufactures, the length of life is

fifty-two years, and this among the working classes, showing how much life is shortened amongst the poor in a manufacturing district. There is a considerable discrepancy in the length of life among the higher classes: in the gentry of Manchester it is as thirty-eight, and in Rutlandshire forty-eight; and it is therefore not surprising, that those persons who have made fortunes in our large cities, should desire to domicile in so beautiful and rural a district as Leamington. And it is to be regretted that we have no tables of longevity kept in this county, (for, omitting the city of Coventry and the town of Birmingham) I do not think there is any district more healthful. Persons of this class form a very numerous and important proportion of the patients whom medical men are called upon to treat. They resort here in numbers, because it is not only healthful, but quiet, and they are important, because they are the principal class that can pay for expensively-educated medical skill.

To this class, super-added to pure air, proper diet, exercise and sleep, (which are the first elements of health to all, of whatever rank or position,) the right government of the mind, a knowledge giving a control over the affections and passions, and leading to a proper regulation of the tastes and amusements, is essential to any systematic and successful endeavour towards the prolongation of life. The medical man who is called upon to be the honest adviser of the educated and intellectual, who are also frequently the idle and the luxurious, may, by clearly seeing and appreciating the circumstances I have adverted to, be able the more delicately, and therefore the more effectually, to point out the evils which may arise from ill-regulated principles, passions, affections, and tastes, which are apt to destroy or shorten life, diminishing its energies, and perverting its very enjoyments into pains, and yet all the while be frequently unsuspected as the source of so much evil. With the germs of life are intermixed, selfishness, pride, and estrangement from God, the real seeds of death; and however vigorous the growth of the animal fabric, however energetic the endowments of its maturity, we know from these causes that its days are numbered; and that even if it should escape destruction from causes that are accidental and extraneous, it is sooner or later doomed to perish by the slow but unerring operation of corrupted mental affections, inseparable from its nature and coeval with its birth.

In the early periods of life all the powers of the system are directed to the building up of the frame, and of the different organs, to their consolidation, and perfection. An abundant store of materials is wanted for these operations; and although the consumption and renovation of these materials be considerable, yet the supply much exceeds the loss, and the body accordingly continues to augment in bulk. In course of time these opposite processes of reparation and decay approach nearer to an equality, and at length are exactly balanced. There comes a time when the balance, hitherto so evenly kept, begins to incline, a diminution of energy becomes sensible, and the waste exceeds the supply.

Old age steals upon us by slow and imperceptible degrees, which even when obvious to others, are often unknown to ourselves. Nature, when the system is entrusted wholly to her laws, thus kindly smooths the path along which we descend the vale of life, and conducts us, by easy stages, to our destined place of abode. But the number of those who thus gently glide along the stream of years is small indeed compared with those whose declining age is withered by infirmities, or embittered by disease. The "life that melts in unperceived decay" is rarely met with amidst the numerous and diversified causes of premature decrepitude to which man, in his civilized condition, is obnoxious. Such are nearly the words of Dr. Roget, in his elegant "Essay on Age." It is to aid nature in keeping the balance of the powers of life even, since every derangement or irregularity of that balance is the sure forerunner of evil, that the aim of the physician, and of every one who wishes for long life, should be directed. Well informed men, would they turn their attention to the laws which regulate their own animal economy, and the *emotions* and *passions* that affect their heart and brain, their liver, and digestion, could do much for themselves. The old adage tells us, "every man at forty is either a fool or a physician." How few of our early literary acquaintance do we find living at sixty years of age; hardly any of those who have been born to competence, or who have been exempted by early success in pursuit of fortune, from those exertions of mind and body which, temperately, faithfully, and judiciously used, appear to prolong life, as well as to sweeten it. The effect of anxiety and broken rest in shortening life is manifested in the medical profession.

I have met with the following interesting anecdote:—On occasion of the funeral of one of his associates, a gentleman states, eight of his former fellow students met at his grave, and some of them not having seen each other for a long time, they agreed to dine together, and talk over the merits of their friend, who was much esteemed, and was fast rising into fame. This was ten years ago, and of the eight cheerful and hopeful men who then sat down together, himself and another are the sole survivors.

Many years ago I dined myself, at Oxford, with about forty of the principal practitioners in Oxfordshire. On a visit to Mr. Tuckwell, in 1845, he reminded me of the meeting, and that Dr. Kidd, Dr. Conolly, Mr. Pitt, and myself, were the only survivors, *he believed*, of that party, and he has since died.

But to return. The view of the subject which I have indicated, and which I wish to become general, would place medical men in a much higher vantage-ground with regard to their patients, than that they should consider themselves mere healers of lesions in the organs, and disorders in the functions of the animal economy; or even, which is one of our principal uses after all, the conservators of the peace in the disturbed bowels of the idle and full fed.

If it be made manifest by tabular returns, drawn from undoubtedly authentic sources, that unkindness to neighbours, to mankind as our brethren, that pride, lust, and infidelity, have in succession destroyed or

shortened the lives of the inhabitants of the world, and that these passions and vices alone, independently of, and separated from, the due supply of food, clothing, and exercise, are the only recorded causes of decay, and of the shortening of life for the first 3500 years of the world, a most important step will have been gained in our attempts to lengthen it. The best way of learning to build up a piece of machinery, is to examine carefully the process by which the inventor takes it to pieces. Before directing your attention to the statistical facts to which I allude, and that I may not be supposed to be indifferent to the obvious causes of the shortening of life by impure air; food, unwholesome in quality, or in excess, or defective in quantity; irregularities in exercise and repose, from the poor artisan, or shirt maker, or literary drudge, who toil their fourteen hours a-day, to the sluggard, who draws out—

“For a little more sleep and a little more slumber,
Till he wastes half his days and his hours without number.”

Upon each of these, which are in continual operation, I would make a few observations.

It may be concluded that not a great deal has been added to the knowledge of the ancients respecting the causes of disease, for not only the most ancient physicians, but also the oldest historians and poets, are found admonishing or moralizing on the sins of commission and omission in respect of the use of the means of improving and prolonging life, and that in language wonderfully similar to what is used by our modern writers on statistics and sanitary improvements. The science of health is not new, but it has been, preached hitherto as if to the winds; and in these latter times the genius of mammon, the accursed love of lucre, has triumphed over, and trodden under foot, every other principle and feeling, and a drop of human blood weighs as nothing in the balance against a grain of gold. It is true that the ancients were unacquainted with much that is to be found in the very A B C of medical men of these days. They knew not the exact chemical composition of vital air, but they were sufficiently acquainted with the advantages and necessity of breathing pure air, and knew from observation where it was best to be found. They have left many directions on this subject, and in the choice of sites for their habitations and towns, they seem to have been guided by a practical knowledge superior to our own, or at least they have, in many instances, acted with a superior sagacity. They seem to have been fully as much aware as we are, of the advantages of founding large cities on the banks of navigable or tidal rivers. The defect of an opposite plan may be seen in more modern cities, such as Manchester, and Birmingham, and other places which have overcome every obstacle, and risen to prosperity, only by the indomitable energy and perseverance of the Saxon character. On the whole, this rule in founding large towns has been in all times well observed, so much as to give rise to the odd remark of the pious but simple-minded man, who said, that “it was a striking instance of the goodness of Providence to have caused great rivers always to flow through large towns.”

The ancients would appear to have paid particular

attention to the state of the atmosphere which should surround their houses, and to have regarded moisture and humidity not with such disfavour as now generally is attached to them.

That a merely humid atmosphere, if otherwise sweet and pure, is not unfavourable to longevity, we may infer from several well-established facts. The lives of the inhabitants of Great Britain afford more examples of longevity than those of any other country in the world; and the inhabitants of Cornwall, which is more nearly surrounded by sea than any other county, affords also more instances of longevity, with the bodily health perfect, and the mental faculties entire, than any other county in England; it is no unusual thing to find peasants and miners of 90 years of age. There was a Cornish beggar, of the name of Brown, who lived to the age of 120, and a peasant, of the name of ———, who was 130 years of age.

Galloway, also, on the south-west coast of Scotland, comprehending the shires of Wigtown and Kircudbright, has probably, with a greater share of mists and moisture, a greater number of long-lived inhabitants than any of our English counties whatever. In the last century upwards of twelve persons were living, of between 100 and 115 years of age, in a population of ———, eleven between 90 and 100, and forty-eight between 80 and 90—a degree of longevity not equalled in any part of England. These places are remarkable for the humidity of the climate; and the population, either from poverty or from the nature of their daily pursuits, are continually exposed to its influences.

Nothing of the atmospheric influences appears to be so fatal as drying easterly winds, which appear to carry disease and death on their wings to every place on which they blow; and it will be found on a survey of the dreadful scourges, in the way of plagues and pestilences, that they have generally arisen in the east, and universally become mitigated as they travelled to the west. Even bales of cotton, loaded with the fomes of plague, lose their infectious quality when travelling westward.

Clot Bey, the celebrated surgeon to Mahommed Ali, has written on the subject of the origin of diseases in the Levant and the East, and which universally travel and become mitigated as they approach the West. These diseases belong to the children of Ham, and are incompatible with the blessing promised to Japhet, of whom we are. Mr. George R. Gliddon, late United States Consul, at Cairo, in his work on “Ancient Egypt,” page 59, observes, “That colonization of the Caucasian race of white men can never extend into the interior of Africa.” The climate of central Africa is mortiferous to white men; it does not change his skin, hair, facial angle or osteology, it kills him outright, if he crosses a certain latitude. Of course here and there an exception may be instanced, where white men have crossed the (to their race) deadly miasmata of central Africa, but these exceptions are so rare that they fortify the rule. Witness the late Niger expedition, witness the grave yard that central Africa has been to the most enterprising travellers; witness the fruitless attempts of Mahommed Ali to send expeditions but a few hundred miles beyond Khartoom.

The observation on humidity is the more in place here because your healthful and delightful town has been in some degree injured, by having had attributed to it the name of a low and damp situation. This inculcation has been attached to the town generally, although in the first instance it was probably intended to be applied to only a particular part of the old town. I know, that however untrue the statement, and unjust the opinion, they have deterred some families from visiting, and others from settling among you.

Such an error, propagated at first to enhance the value of property in one part of the town over another part, has ultimately had an injurious effect upon all; for it happens that those who have made fortunes at the counter, or the counting-house, the shop, or the warehouse, the bank, or the manufactory, in looking out for a quiet spot where they may enjoy their gains during their remaining years to the best advantage, naturally make the general salubrity of their intended *otium cum dignitate* their first object of inquiry; for little would it boot to escape from the Scylla of the stinking fogs of London, or the smoke of Birmingham, or the excitement of Manchester, to fall into the Charybdis of undrained fens, dry arid sands, or the society of rabid anarchists in morality and religion.

I have known a wealthy family select Northampton in preference to Warwick, all other things being equal, by the fact that Dr. Price, in his old assurance tables, places the average duration of life at Northampton at 52, and at Warwick at 51, the chance of a single year in their lives being of more value to them than the enjoyment of the unrivalled display of beauties, both natural and artificial, to be found here.

There is little difficulty in giving directions to the common people, let their ailment be what it may, on the subject of diet; at least, if there be any difficulty, it is how to advise in what manner they may procure food sufficiently nutritive to support life, more especially during convalescence, when from the waste of materials, as in fever, they require more than an ordinary supply. In this respect there is a sad deficiency not easily supplied, and a crying evil not easily redressed, but which imperatively demands a remedy, although, notwithstanding many well-meant efforts, it seems to be gaining ground.

The medical man is called upon equally with his fellow Christians, to use his best endeavours to stem the flood of misery, and those who are called upon occasionally, or habitually, to minister to the diseases of the poor, will bear me out in saying that a frequent cause, and constant aggravation of their diseases, is to be found in want, frequently hard-pinching hunger, and could the medical man spend on his poor patients all the fees he receives from the rich, he would yet leave much undone. Our position entitles us, however, to stir up this dormant charity of others; and we have known at times the restless pillow of the rich man smoothed, and his aching head relieved, by the simple prescription of his sending a little of his abundance to the house of a suffering neighbour.

There is no person more opposed to the two systems of charity, as commonly exhibited, and which are opposed to true charity than I am. I mean the com-

pulsory aid we are obliged to give to the systematically made poor by those who love to have them so, that they may, without fatigue to themselves, live by their labour; and also, that system of ostentatious charity which lives only as it can be made the subject of display. But medical men have more opportunities of discrimination in this particular than most other men. Let us be ready to avail ourselves of such opportunities; let us remember the Scripture exhortations to aid the weaker brethren.

That beautiful writer, Sir Walter Scott, thus elegantly expresses himself on the duty of human brotherhood in words, which for encouragement, ought to be engraven on our memories. "The race of mankind would perish, did they cease to aid each other. From the time that the mother binds the child's head till the moment that some kind assistant wipes the damp from the brow of the dying, we cannot exist without mutual aid; all, therefore, that need aid have a right to ask it from their fellow mortals; none who hold the power of granting aid can refuse it without guilt."

The aid of the medical man is needed from the cradle to the grave, and he ought never to be found unprepared to discharge the duties of humanity to the whole of the man; he only has the vantage ground of knowing his necessities, physical, moral, and spiritual. These duties should be discharged in a hearty and Christian temper, without grudging, and without assuming any offensive appearance of that superiority which yet, in many instances, his superior qualifications entitle him to claim, and which his patients will be ready to concede, if he, and the profession, as a body, will occupy that portion of the work, in the progress of society, which properly belongs to them,—a work happily going on in Britain, and which will continue to do so, till the materials are fully prepared to be placed in more exact order than the wisest mortal can do now.

But to return from the subject of the diet of the poor, to a different class, where the medical man is called upon to discharge his duties in a different manner. With the studious and gay, the voluptuous and luxurious, there is great difficulty; and principally on this account, that they have encouraged their self-indulgence until their faculties have become, in this particular, obscured, and they are, to a considerable extent, deceiving themselves; they are anxious to deceive others, even their medical attendants, and thus, high-minded as they may otherwise be, they scruple not to practice deceptions and tell falsehoods, in order to attribute their uncomfortable feelings, their languor, debility, heaviness, and loss of spirits, to any cause rather than their own imprudence and excess.

Such persons, determined on the indulgence of their appetites, and little disposed to restrain their passions, are not at all agreeable, and are oftentimes dangerous, patients, as far as their medical attendant's reputation is concerned, for they are ever ready to sacrifice them to any nostrum-monger, or fashionable dyspeptic doctor, who may chance to have his star, or his rushlight rather, in the ascendant. In many of these cases it is impossible for a skilful and straight-forward

adviser to secure the good will, although he may, in reality, have gained the high opinion of the capricious patient.

The mind of the medical man revolts from this want of confidence; he feels himself unable to secure his own peace of mind, and at the same time conciliate the sensual and self-indulgent patient, who, by circumstances of comparative wealth, may render him too important to be despised or offended; and until the profession learn to uphold each other, and not stand ready to aggravate and take advantage of such causes of distrust, will continue to do so. Nevertheless, the direct and honest way ought to be adhered to, and in the end it may be hoped that it will turn out the most advantageous, even in a pecuniary respect. Let the full truth be told boldly, but candidly and kindly. It is not necessary to imitate the brusqueness of a Radcliffe, who told King William that he would not have his Majesty's two legs, even to have his three kingdoms along with them; or of our Abernethy, who gave a delicate young lady a shilling to buy a skipping rope; or of a Gregory, who recommended a fat epicure to live on sixpence a day, and work for it. Let us tell our patients that if they will continue to neglect the laws of health;—if they will continue to abuse the laws of good will, by being estranged from each other—by becoming separated and exclusive from the body general;—if they will be proud and indolent, and by drunkenness and gluttony abuse their constitutions, or other evil indulgences of mind and body, the consequences will be on their own heads, and we shall have discharged our duty. Let us convince them that anxiety, irritability, and anger, are the great destroyers of life, and that the shortest-lived of the patriarchs, all of whose names are symbolical of character and principle, was *Nahor*—which is *angry*—who only lived to half the age of his immediate ancestors, and to one-fourth of the average of the whole of those preceding him, an undoubted type of the effect of *anger* on the life of mankind. I have procured from various sources a variety of statistical tables on longevity, and I find that divines, schoolmasters, annuitants, and all those whose pursuits involve order and discipline, and who have also a legal desire to maintain themselves by peaceful union, promoted by the right exercise of the *prospective feeling*, live longer than any other class whose exertions are disorderly, and who are continually engaged in the struggle to live, or, perhaps, to attain excessive wealth, by those labours in which the feelings and passions are excited, though not always expressed.

I have already shown that the agricultural gentry have a decided superiority over the manufacturing; and the extraordinary length of life of some of our agricultural poor, has been generally among those who have been drilled for the army. Of 100 persons who have attained the age of 120, the greater part had the advantages of learning, obedience, order, discipline, early rising and obtaining pure air, moderate supplies of food, and, above all, continually contemplating and working with the *first cause*.

The pursuit next to that of the above, most favourable for long life, appears to be that of poetry, and if

we look to the list of Romans and Grecians whose ages are recorded for their longevity, it will be found that they were generally poets or players. But we will now examine the list of the Fathers, as recorded in Genesis, where "death reigned from Adam to Moses," and we shall find a distinct, separate, moral cause, so clearly connected with each successive abbreviation in their term of life, that it is impossible to escape from the conclusion that they have been as cause and effect. In the first column you will observe a list of the first ten patriarchs from Adam to Noah, omitting Enoch, who did not die; their lives on the average exceed 900 years each.

First Class.—Cruelty and Oppression.

Adam	....	....	....	930
Seth	....	....	....	912
Enos	....	....	....	905
Cainan	....	....	....	910
Mahalabel	....	....	....	895
Enoch ascended to Heaven, and did not see death.				
Methuselah	....	....	....	969
Lamech	....	....	....	777
Noah	....	....	....	950

In the 600th year of Noah's age, because of *oppression and cruelty*, God was pleased to destroy all the "*mixed seed*," and all the "*other sons and daughters*" of these, excepting Noah and his family, who continued for four generations to live half the time of their predecessors, namely:—Shem, 100 years before the flood, and—

Second Class.—Pride.

Shem	....	....	500 after the flood.
Arphaxad	....	....	438 " " "
Salah	....	....	433 " " "
Heber	....	....	460 " " "

Soon after whose time, they appear to have had a desire to create a name for themselves, and, building the Tower of Babel, were forthwith dispersed and separated from each other.

Third Class.—Idolatry.

Peleg's age at his death was	239—His name signifies
Rue	239 [dispersion]
Serug	230
Nahor	148
Terah	205

The shortening of the lives of the patriarchs, after their dispersion, appears to commence with Peleg and terminate with Terah. Nahor's name, which signifies "*angry*," is remarkably opposed to that of Noah, which signifies "*rest*," the length of life in one exceeding that of the other upwards of seven times over. We may infer that the offence of this section was that of idolatry, for it was from the city of Ur in Chaldea, from which Abraham was called. From whose days, to the time of Joseph, their lives progressively shortened till we find them in Egypt—

Fourth Class.—Lust.

Abraham	....	....	....	175
Isaac	....	....	....	180
Jacob	....	....	....	147
Judah	....	....	....	—
Joseph	....	....	....	110

The offence that appears to have been most general in Abraham's day, appears to have been lust, from which this renowned father was not exempt, as we find him in his extreme old age, having children after the flesh by Keturah. We are in comparative ignorance of the length of life of the Israelites, during their 400 years' sojourn in Egypt; but we have a remarkable shortening of their lives during the time they were in the wilderness. It appears that there were six hundred thousand men fit to carry arms at the passage of the Red Sea, which we may suppose to represent all the males of twenty years of age and upwards; but at the passing of the Jordan forty years afterwards, there were only two—namely, Caleb and Joshua, then living, which would be as great a miracle as if the midland counties of England had not two individuals of sixty years of age in them. The offence of Israel during this time of wandering, was *unbelief*, hardness of heart, and denial of God.

The inference to be drawn from this consecutive view of the loss of mortality by disobedience, by cruelty, by pride, by idolatry, by lust, and by want of faith, and which lessened life by distinct and marked large intervals, is not materially affected by the chronology of the Hebrew or Septuagint, for both alike demonstrate that immorality is the true, however remote cause, of all physical evil; and if the knowledge of the facts on which this opinion is founded were generally known, I believe that the best results would follow, from the conviction of their *truth* on the minds of medical men, whose faculties are prepared, by reason of use, to follow it philosophically more closely than any others. Principles are always the same, and their effects are the same, at one period of time as another. It cannot be supposed but the same principles and causes which shortened the lives of the first inhabitants of the earth, will shorten the lives of our patients, unless they are withdrawn from them. But we must ourselves draw correct conclusions, before we can confidently and successfully persuade the public to act upon them; and the practical conclusion to be drawn from the historical and statistical facts I have now laid before you are these,—that a more wise and judicious regulation of the thoughts, passions, customs, and habits of our patients, is requisite to their well-doing. As medical men we are enabled to hear and discover much that is concealed from the neighbour, the friend, or the confessional, and we may rest assured that we are working in the right direction, in the path of duty, if we lay bare tendencies that not only shorten life, but are the causes also of almost all the insanity there is in the world.

We shall have the approval of our consciences, should our efforts not be altogether crowned with the success they aspire to, if we unsparingly condemn and point out the first—the incipient mischief of disturbing their heart's action, or an over-anxious working of the brain, as equally destructive to life as the more gross and obvious disobeyers of nature's laws. Which is most agreeable to look upon, the foul tongue of the glutton, or the white, pale, flaccid one of the tradesman, who has a bill coming due which he is not prepared to meet? In either case they have lessened their true

enjoyment, as well as destroyed all prospects of longevity, by ignorance of the fountain from which all knowledge is to be deduced; and we are *particeps criminis* if we hide from them, or neglect to remind them of, the terms on which alone they hold the healthful possession of their present lives, to say nothing of that future condition on which it is the province of the Divine to enlarge.

OVARIAN DROPSY.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

The following case, which occurred in my practice during my residence at Leamington last winter, presents some peculiarities which may render it interesting to the profession, and I therefore forward it to you for insertion in your Journal.

I am, Sir, your obedient servant,

GEORGE KENNION, M.D.

Harrogate, June 6, 1849.

CASE.

January 1, 1849. Miss C., aged 21, came to Leamington, to place herself under my care. She had consulted me about four years ago, on account of a tumour in the right hypogastric region, which from the history given, appeared to have commenced two months previously, and had gradually increased up to that time. Six months previously, while playing with some children, she received a violent kick in the right iliac region, which caused such intense pain, as to make her faint, and this continued for at least a fortnight. There was not much difficulty in ascertaining that this tumour was an encysted dropsy, probably ovarian; and besides the inconvenience and anxiety occasioned by its rapid growth, she suffered frequently from much pain in the part, which was relieved by the application of leeches two or three times. Afterwards she rubbed in an ointment of iodine night and morning, and took five grains of the hydriodate of potash three times a day. Under this treatment the tumour gradually decreased in size, and in about ten weeks, was apparently removed, and she enjoyed, to all appearance, perfect health, with the exception of the entire suppression of the catamenia which had appeared once or twice before the time when I was first consulted by her. Last October the catamenia reappeared, but very scantily; the same occurred in November and December.

In the beginning of December, she for the first time perceived a return of the swelling, but did not pay any attention to it, until about the middle of the month.

On this day, (Jan. 1st,) she travelled up from Yorkshire, and I saw her in the evening. She complained of extreme pain in the right iliac, and in the right hypochondriac, region. The pain was so severe that for more than a fortnight she had scarcely had five minutes' quiet sleep. The size of the abdomen was considerably larger than in a woman in the ninth

month of pregnancy. Fluctuation was distinct over the abdomen, from a line about two inches above the umbilicus down to the pubis; and transversely all across. Posteriorly and above this line the sound was resonant on percussion. The form and size of the tumour were thus well-defined, and as far as it was possible to ascertain, the sac appeared to be unilocular. The result will show how very far this was from being the case. The pulse was 120, (below which it never fell,) exceedingly small and friable; the breathing very much embarrassed; the tongue very foul; the bowels confined but easily irritated; the urine scanty and loaded with lithates, but in other respects healthy. The debility and exhaustion were very great, and with constant, craving, *thirst*. There was the greatest repugnance to food.

A few leeches applied over the seat of pain had the effect of entirely removing this distressing symptom, from which she did not afterwards suffer. Little, however, could be done in such a case, beyond the use of mere palliatives. Mr. Babington saw her with me on the 7th, and on the 16th we decided upon removing a portion of the fluid, in order to give some degree of temporary relief to the breathing, which had become most painfully oppressed. A small quantity only came away, (about three pints,) although the trocar was twice inserted. This fluid was turbid and red, and after remaining in the vessel about a quarter of an hour, a good deal of loose flabby coagulum had formed at the bottom. The relief to the breathing which was thus obtained, though slight, was greatly prized by our patient, but the sac rapidly refilled, and she died on the 22nd, perfectly exhausted.

The body was examined by Mr. Babington, Mr. F. Clarke, and myself.

On opening the abdomen a few ounces of straw-coloured fluid escaped from the peritoneal sac. The whole abdominal cavity was filled with an enormous congeries of cysts, (hydatid?) the coats of which were so exceedingly thin that they could scarcely be touched without breaking. The size of these cysts varied from that of a filbert to the size of an orange; the fluid which they contained varied in colour and consistence, the larger number containing a similar fluid to that which had been removed by paracentesis.

The effect of this rapidly-increasing disease had been to push upwards the whole of the abdominal viscera to such an extent, that the caput cœcum coli, doubled upon the ascending colon, occupied the right hypochondriac region; the upper margin of the lesion was as high as the third rib, and the lower margin not lower than the fifth rib; while upon the left side, the stomach immensely distended with flatus, encroached still more upon the cavity of the chest. On removing as well as we could the diseased mass, it was found to be connected entirely with the right ovary and broad ligament, those parts on the left side being perfectly healthy. The right broad ligament was studded with growths of a very firm cerebriform character and appearance, from the size of a pea to that of a walnut; some of these were very highly injected, others were pale, and contained an embryo cyst, their growths being *external* to the cyst.

There are some interesting and instructive features in this case, which, however, are so evident that they scarcely require notice. The origin of the disease,

four years ago, from a violent blow;—this blow followed in six months by encysted dropsy of the ovary;—the temporary removal of this disease by iodine;—the apparent quiescence of the disease during the lapse of so long a period;—the suppression of the catamenia during this period;—its reappearance in October, and almost simultaneously with this reappearance, the lighting up afresh of this malignant disease, which ran its course so rapidly. All these are points interesting in a pathological point of view. Another point which is worthy of notice in the diagnosis of the case, was the apparently *unilocular* character of the cyst, whereas, in fact, the disease consisted of many hundreds of cysts. Both Mr. Babington and I were deceived upon this point, and the only way in which I can explain the illusion, is by supposing that, in consequence of the extreme thinness of the walls of the cysts, there was little or no resistance to the extension of the fluctuation from one cyst to the other.

ON THE TREATMENT OF FRACTURES OF THE TIBIA.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,—In the *Provincial Journal*, dated May 2, 1849, at pages 240, and 241, there are some very practical observations upon the management of fractures of the tibia, by Mr. P. H. Bird, to which (if you think they may be useful,) I will add a few additional remarks. As, however, I never treated a fractured tibia in any other way, I cannot speak from experience of the superiority of this over other plans in my own practice; nevertheless, I was led to adopt this kind of treatment in all cases of fractured tibia, from having seen so many crooked bones which had united under different management.

On all occasions much care is requisite in preparing the bed before the patient is placed upon it. Having procured a board nine or ten inches broad, and long enough to reach from the middle of the thigh (or if the leg requires raising, from the ham,) to some distance beyond the frame of the bed-stock, it has been pushed under the bed, and the feathers have been pushed beyond each side of the board, until the bed was no thicker than one or two inches, in order that the ends of pieces of strong tape might be sewn firmly to the bed, along the line over which the rollers are to be placed, at such distances from each other as to admit of their being tied, from the outer side of the rollers, a little below the knee, over the centre of the leg, and just above the ankle. In sewing the ends of the tapes, a long needle has been pushed from underneath the bed, through it and through the tape upon it. On some occasions, tapes have been fixed for tying above the knee also (over the thigh,) especially when there has been much spasm of the muscles; when the patient has had disturbed sleep, or has been naturally irritable, and very restless.

During the time occupied in preparing the bed, two sheets have been rolled up tightly, long enough to

reach from above the knee to so far beyond the end of the foot, as to admit of being sewed together, including a half brick, folded in calico, at the end of the heel, for the purpose of afterwards admitting a pile of covered bricks, for a foot-support. The rolled sheets have been rolled from each side of a piece of calico, about a yard broad, and the same length as the rolls, towards the centre of it, until they would just include a narrow pillow, placed upon padding above and below where the calf of the leg is to rest, so as to avoid pressure on the heel, and after the leg has been placed upon the pillow, having the feathers pushed from the centre, and defended by oiled silk, and three or four thicknesses of calico, folded lint has been placed upon the tibia, both above and below the fractured part, so as to keep off pressure from a splint placed along the bone, upon which the tapes are to be tied. Sometimes two tapes have been tied round the pillow and leg, the one above, and the other below, the calf, before tying the rollers; the rollers then have been rolled completely up to the pillow in which the leg was enveloped, and have been tied there with the three tapes on each side, over the splint.

If the patient be a poor man, having a bed only, (without a mattress,) supported by cords, the board should not reach higher under the bed than the ham, because the hips will sink down into a hollow, and the board, with the thigh, will form a double inclined plane. The contrivances, of course, will be varied according to circumstances, whether any side splints be needful within the rolls, or any elevation of the foot above the knee, when the leg is much swollen.

In cases of compound fracture, the limb has been placed in the most convenient position for exposing the wound, whether the patient has been upon his back, with the leg straight, upon his side, with the knee bent, or half-way between the two positions. If on the side, the front roll, of course, has reached from the knee to the instep only.

The wound has been covered with doubled lint, a little bloody; over it a larger piece of doubled lint, soaked with the compound tincture of benzoin, and over that a piece still larger, soaked, so as to seal up the wound air-tight. If the leg be easy, and the lint free from any bad smell, the lint may remain ten or eleven days undisturbed; if uneasiness or offensive effluvia indicates the necessity of removing the lint sooner, the wound will show whether a poultice or any other application be desirable. The foregoing was the practice adopted in the Sheffield General Infirmary upwards of a quarter of a century ago.

In reference to compound fractures extending into joints, a case was published (elbow-joint) in this Journal of June 3rd, 1846, at page 254; and in February of this year (from a coach accident) a somewhat similar case occurred, the result of which has been much more satisfactory.

I am, Sir, yours, very truly.

W. ALLISON.

East Retford, May 9th, 1849.

[The publication of this paper has been unavoidably postponed.—ED. JOURN.]

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF PROFESSOR SANDS COX, F.R.S., SENIOR SURGEON TO THE HOSPITAL.

Reported by Mr. PETER HINCKES BIRD, late Resident Medical Officer.

CASE XXIII.

NECROSIS OF THE LOWER JAW.

William Gold, aged 6, admitted as an out-patient on October 26th, 1846, under the care of Professor Cox.

His mother states that about a month ago he had "typhus fever." About three weeks ago she perceived the gums of the right side of the lower jaw "eating away," and in a short time the bone appeared. He took some powders, which made the teeth loose, so that he removed four teeth himself. One of these powders, on being analysed, was found to contain mercury.

Present State.—A large portion of the lower maxillary bone of the right side is exposed, extending from the first incisor tooth to the last molar. All the teeth belonging to this portion of the bone are gone, with the exception of one of the incisors. The bone is of a lightish brown colour, and quite dead, being soft, and easily breaking under pressure. Its cancelli are filled with a very offensive matter; it is loose, and can be easily moved, a small portion containing an alveolar process, with the incisor tooth, is quite loose. His health is pretty good. The loose portion of bone was removed by Mr. Cox, and a gargle containing chloride of lime and tincture of myrrh ordered.

29th. The piece of necrosed bone appeared looser this morning, and on using a little force came away. It consisted of the entire thickness of the bone, but not of its depth, about an inch in length, and a quarter of an inch in thickness. Moderate hæmorrhage followed, which was restrained by a compress of lint.

November 2nd. Doing well; there is no more necrosed bone to be seen, and the gum is healing over the space formed by the loss of bone.

12th. The gum has entirely healed over the bone; there is a considerable space formed by its loss.

Remarks.—Necrosis of the lower jaw is not so common as that of the extremities, and excepting this bone, and the scapula, the process of regeneration has only been noticed in the cylindrical bones. It is most likely to occur in childhood and at puberty. Necrosis most frequently attacks the cylindrical bones, but the flat ones are not exempt from this disease.

Necrosis is not unfrequently a sequela upon typhus, small-pox, scarlatina, and measles. The administration of mercury may itself give rise to the disease, especially in the lower maxilla. In the above case it is difficult to say how it was produced, whether by the constitutional effects of typhus fever, or by the pernicious administration of mercury, or by the combination of the two, most probably by the latter.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, JULY 11, 1849.

In the last number of this Journal our readers were presented with a letter addressed to Dr. Hastings, as President of the Council of the Provincial Medical and Surgical Association, by Dr. Toogood, on the subject of "Secret Poisoning," and the "propriety of presenting petitions to the two Houses of Parliament, praying them to adopt such measures as in their wisdom they may devise, to prevent the indiscriminate sale of poisons." To this subject we wish to draw the serious attention of the members of this Association, believing as we do, that it is one which imperatively calls for the interference of the profession, since it is to the profession alone that the public look for information and instruction in a matter which to them is mixed up with so much of the marvellous and horrible.

So lately as in the year 1832, Professor Christison, in the second edition of his admirable work on "Poisons," in allusion to the art we are now considering (which was previously to his time, generally believed to have been practised very extensively abroad,) came to the conclusion that, "with regard to the noted instances of secret poisoning, which occurred towards the close of the seventeenth century in Italy and France, it is plain to every modern toxicologist from the only certain knowledge handed down to us of these events, that the actors in them owed their success rather to the ignorance of the age, than to their own dexterity." He subsequently goes on in the following words, which have unfortunately been so completely contradicted by recent events, as to render them remarkable:—"But little apprehension need be entertained of the art of secret poisoning, as understood by Toffana or Brinvilliers, or as it might be improved by a modern imitator. It seems to have escaped the attention of those who have written on the subject, that the practice of such an art requires the knowledge, not only of a dexterous toxicologist, but also of a skilful physician; for success must depend on the exact imitation of some natural disease." And again, "It must be granted, indeed, that the late discoveries in chemistry and toxicology have made poisons known, which might be employed in such

a way as to render suspicion unlikely, and to baffle enquiry. But the methods now alluded to, are hitherto very little known; they cannot easily be attempted, on account of the variety and difficult preparations of the poisons; they can never be practised, except by a person conversant with the minute phenomena of natural disease; and it is no part of the object of this work to make them public."

On the faith of these statements, supported indeed by Orfila and other toxicologists, we have been going on until very recently in the happy and comfortable belief, that this horrible art was neither practised, nor indeed practicable, in this country; but there is now ample ground for coming to the opposite conclusion with Professor Taylor, who states his belief "that secret poisoning is more frequent than is commonly believed in this country." Indeed the cases which occurred in Norfolk, together with that in Somersetshire, mentioned by Dr. Toogood, and others which have lately come to light, leave us no choice in our convictions on this matter, so disgraceful to the country and to the age in which we live. There can be now no doubt that arsenic, opium, and strychnine, have each been used by self-taught murderers with diabolical subtilty and effect. It is useless to pretend that the subject should be passed over in silence, from the fear lest parties otherwise ignorant should thus have the weapons presented to their hands. The "march of intellect" has taught even the lowest class in this country how to imitate, and perhaps excel, Toffana; and our only hope now lies in placing a restraint upon the sale of those poisons which have been proved to be the agents in the production of those dreadful tragedies which of late have been so frequently exposed in our courts of justice.

Nothing in our opinion can be likely to work better than the plan proposed by Dr. Toogood, but we would earnestly impress upon him, as well as upon those who we trust will co-operate with him in this truly philanthropic design, that if good is to be done, there must be more than the mere presentation of petitions. We fear the old adage will again be exemplified, that "what is everybody's business is nobody's business," and we shall find the subject quietly dropped, as has lately been the case with the question of Medical Reform.

We would therefore suggest to Dr. Toogood the propriety of appointing a committee at the ensuing Anniversary Meeting, with the object

not of simply presenting petitions, but of taking steps to draw up a short Bill, to which no class in this country could possibly object, and which might, with the sanction of the profession, be easily passed through Parliament in the next session.

We earnestly and confidently hope that Dr. Toogood will undertake to carry through the task which he has so well commenced, and that he will be cordially assisted by those members of the Association whom he may call upon to assist him in developing the plan which may be necessary to prosecute his benevolent intention.

Reviews.

Portraits of Diseases of the Skin. By ERASMUS WILSON, F.R.S. London: Churchill. Fasciculus V.

Portraits of the Diseases of the Scalp, with the safest and most efficient modes of Treatment. By WALTER COOPER DENDY, Senior Surgeon to the Royal Infirmary for Children. London: S. Highley. Number I.

Eruptions of the Face, Head, and Hands, with the latest improvements in the Treatment of Diseases of the Skin, illustrated with Coloured Plates. By T. H. BURGESS, M.D., Editor and Translator of "Cazenave's Manual of Diseases of the Skin." London: H. Renshaw. 8vo, pp. 254.

The attention which diseases of the skin are now receiving from the profession generally, would lead us to hope, that such a splendid work as that at the head of our list will continue to receive that encouragement which it so justly deserves. Nothing can exceed the fidelity of the drawing and colouring of these truly wonderful portraits of Diseases of the skin, except their beauty, as specimens of modern art. The present Fasciculus is even more faultless than its predecessors, the representations of Xeroderma, Ichthyoides, and Psoriasis Vulgaris, being so true to nature as to defy the actual comparison with the living structures. To all those who can afford the outlay we would say, if your knowledge of diseases of the skin is incomplete, you cannot possibly supply the deficiency so well as by the careful examination of these plates as they severally appear.

With regard to Mr. Dendy's work, which is confined to diseases of the scalp, we wish we could speak in terms of equal commendation; but it is no very severe censure to complain that his portraits do not bear comparison with the results of the combined efforts of Bagg, Hulmandel, and Sherwin, when directed by a surgeon in the person of Mr. Erasmus Wilson.

The third on our list is a work of a very different character to either of those above-mentioned, and will prove of great service to those who have already

attained some knowledge of diseases of the skin, but not of that accurate kind which modern researches have afforded. It is an attempt, and a very successful one, to facilitate the study of cutaneous pathology, and to render our information on that proverbially perplexing subject more precise, by describing diseases of the skin in groups or *regions*, in the same manner as regional anatomy is taught. The various modifications in the structure of the skin in different portions of the body justify this division. Thus, those parts covered with hair are differently affected to those which are free from that appendage. The same is seen in those parts freely supplied with the sebaceous follicles, and where the mucous membrane merges in the skin, as in the eyelids, lips, anus, and vulva.

To the young student in this department of our art Dr. Burgess's work will be especially useful, as he will be enabled at once, when a disease, of the scalp for instance, presents itself, to form a correct diagnosis on the principles and by the method of elimination, so well laid down by the author. We would recommend to all such the careful study of the introduction, which explains these principles most clearly, and, indeed, in a manner which entitles Dr. Burgess to our warmest praise.

The treatment recommended is that chiefly introduced by the French, but which has now become almost naturalized in this country. There is also a valuable list of prescriptions, making it a complete manual, so far as it goes, to the young practitioner, who may desire to attain, what we are sorry to believe is seldom possessed, a complete knowledge of this difficult subject.

DR. RANKING'S INQUIRIES.

ON COD-LIVER OIL IN PHTHISIS.

By Dr. CLARK, of Colchester.

(Read at the Annual Meeting of the Suffolk Branch of the Provincial Medical and Surgical Association, Friday, the 15th of June, 1849.)

In answer to the call of Dr. Ranking, of Norwich, upon the Members of our Association, for their experience in the use of cod-liver oil, I gladly embrace the opportunity of our meeting at Hadleigh, to assist, (I am afraid imperfectly, and to a limited extent,) the inquiries set forth by Dr. Ranking in the Journal. A laborious practice must be my excuse for not giving the minute details asked for. I have been using cod-liver oil extensively, both in public and private practice, for the last four years, and I do not hesitate to confess my confidence in it has not decreased, but rather strengthened in persevering in its use, and even extending it to other diseases. I have principally used it in phthisis in its various stages, scrofulous diseases of the joints, and mesenteric affections of children. Far be it from me to vaunt it forth as a specific, for I would expunge such a word from medical nomenclature; but I would strongly urge upon my medical brethren

present to give it a fair trial, and to those who have used it to let us know whether their experience at all coincides with my own. All of us who have been in the profession for some years, are well aware that ever and anon we have some favourite medicine trumpeted forth, which has its trial, and not unlikely serves the trumpeter's ends; but in a year or two no more is heard of it. But in looking into the history of the use of cod-liver oil, we find it rather slow in its progress, but steadily gaining in the estimation of many distinguished medical men. Cod-liver oil (*Oleum Jecoris Aselli*) has been long known in many parts as a remedy in gout and chronic rheumatism. In this country it has been long used, in the northern parts of Scotland, and Shetland, and also in the midland counties of England, during the last century, where the names of Drs. Percival, Bradsley, and others, stand prominently forward in its praise, but little more is heard of it until Dr. Hughes Bennett published a clever *brochure* in 1841, detailing its successful use in the northern parts of Europe, and particularly Germany, where it still continues in extensive use. Since 1841, we have year after year, the leading practitioners giving it their approbation; need I mention Mr. Chalk, of Margate, Drs. Toogood and Madden, of Torquay, and a number of others. We have lately, Dr. C. B. Williams, of London, giving his unreserved sanction in the first number of the *London Monthly Journal*. The latest chemical analysis we have is that of Dr. De Jongh, an account of which appears in the *Pharmaceutical Journal* for February, with valuable remarks from Dr. Jonathan Pereira. From an inspection of its constituent parts, it appears to consist principally of oleate and margarite of glycerine, but it also contains batyric and acetic acids, the principal constituents of bile, and not quite one per cent. of salts containing iodine, chlorine, and traces of bromine. This is to be noted, as its more early advocates ascribed much of its success in scrofula to its iodine and bromine. We have three varieties of cod-liver oil in the English market,—first, the pale straw-coloured; second, a pale brown; and third, a very dark brown. Dr. Pereira considers that which is most devoid of colour, odour, and flavour, to be the finest, and discountenances the opinion which was at one time prevalent, that the brown oil was superior, as a therapeutical agent, to the pale oil. Acting upon this, I at one time, in union practice, attempted the use of the dark; but in every case I was forced to give it up, it was so disgusting that the patients invariably refused to take it. Dr. De Jongh states sulphuric acid to be a test for cod-liver oil, giving out a fine violet colour, which soon passes to a yellowish or brownish red; it would appear, however, to be only a test to distinguish the oil from the liver, from that of other parts of the fish. I have often remarked, that after rubbing a little on my fingers, the cod-fish flavour remained for some hours, and that after repeated washing. Some samples I have had would not produce this.

Its Therapeutic Action and Mode of Administration.—Its therapeutic action is slow and progressive, generally some weeks before any marked effect; the *modus operandi* is supposed to consist in stimulating the lymphatic glands and vessels, and by these means increasing the activity of the capillary system. Dr. Williams ascribes its success to a highly nutrient material having a beneficial influence on the chylopo-

ietic viscera chiefly due to some biliary principle, and in this I think he is borne out by the chemical analysis of Dr. De Jongh. Sure it is, that in every case I have continued the use of it for weeks, it has invariably shown the property of increasing the quantity of the adipose tissue. The dose generally given is from a teaspoonful to a tablespoonful and a half, or more. I have lately preferred beginning with a small dose, even a teaspoonful, to an adult, and increasing it gradually, sometimes giving it alone, or mixed in milk or coffee, and I cannot help remarking the very few cases, after its commencement, where it has disagreed. Some have recommended it to be given in emulsions and other elegant forms; but I think the more unmixd the better plan, at the same time, there can be no objection, for fastidious palates, to combine it with an infusion of orange-peel, or peppermint, or cinnamon-waters. I have not found any difficulty in persuading patients to take it, and after the first few days, no objection is ever given to continue the use of it. I order the dose about an hour after the usual meals. If there is congestion of any organ, or dyspeptic symptoms, it ought not to be given. I have at present a female under my charge, who has received the most marked benefit from its use in scrofulous ulcerations of joints and cervical glands; from great emaciation, she has now become fat and plump, but invariably when she now takes the oil, it produces congestion of the liver. I have never found it acting on the bowels or disagreeing with the stomach in diseases of a low marked character in which I have generally ordered it.

The diseases in which the cod-liver oil has been used are various, such as gout, chronic rheumatism, scrofula in its various forms, phthisis pulmonalis, and caries of the bones, &c. In a short practical paper of this kind, I shall confine myself to the disease in which I have had experience of its use; these are tabes mesenterica, scrofulous ulcerations and caries of the bones, morbus coxarius, and phthisis pulmonalis.

Tabes Mesenterica.—Having the charge of two Union Houses, my experience in this disease is rather extensive. I have put it at the head of the list, as in no disease are the beneficial effects of cod-liver oil more marked and satisfactory than in this. In phthisis and morbus coxarius, the benefit received may be only of a temporary nature, as in most cases we have extensive organic disease; but here it is different. Infants or children are constantly brought in a starved condition, extreme emaciation, enormous abdomens, with pinched up features; in a few weeks, under its use, the abdomen lessens and becomes soft, the skin relaxes, and the general condition improves. I have no notes of cases by me at present, but have had many instances of young children during the last three years, whose health has been restored by the use of this medicine. In morbus coxarius, caries, and scrofulous ulcerations, I have seen great benefit derived from it, although a cure is not accomplished. I know of no medicine, not even iodine, (a medicine I have often been disappointed in) where greater benefit is apparent. I append to this some cases in point.

Phthisis Pulmonalis.—At present the profession looks on with great interest, whether the praise which has been lately given to cod-liver oil by Dr. Williams, of London, and Dr. Madden, of Torquay, is justly due, and when the former gentleman affirms that we

now wield a remedial power, if not to cure this scourge of humanity, at least we can retard and ameliorate the condition of our patient. I think we would not be justified in refusing to aid, by our daily experience, in proving whether the same success crowns our endeavours; my own experience, so far as it has gone, has been much in its favour. In the early and primary stage of the deposition of tubercle, I have no doubt it proves a valuable adjuvant, the only thing forbidding its use is any inflammatory process going on. Auscultation here proves invaluable in forming our diagnosis. It may be used in all its stages: if not a cure, a permanent benefit may be looked for in the first and second. I cannot say much for the last. I am afraid little can be expected from any remedial power in this stage. In a few cases I have fancied that it kept the progress of the disease at bay. In cases of tuberculous cachexia, so well and ably described by my friend Sir James Clarke, and in which this country abounds, I believe no medicine has equal power to cod-liver oil; of course, due attention should be paid to other matters, as we cannot look upon this or any other medicine to act as a specific.

CASES.

I have had under my charge for the last two years, two young gentlemen of most delicate constitutions, having lost five brothers and sisters with pulmonary consumption. The eldest, aged 20, about six feet in height, light complexion. During the last three years has had frequent attacks of severe cough, mucopurulent expectoration, with night perspirations, and loss of strength. The physical signs have been (and to a great extent still continue) dulness in both upper regions of the chest under the clavicles; respiratory murmur scarcely audible, and in parts quite so; complete resonance in right side. Conjoined with other suitable treatment, he has been several times put under the use of cod-liver oil, which has hitherto had the desired effect of restoring him to as much health as might be possibly expected.

His brother, aged 18, of the same height and appearance, accompanied with slight curvature of spine, first came under my charge about two years and a half ago, with an acute attack of bronchitis, which, after the usual treatment, was subdued, leaving him much emaciated, with cough, and extensive mucopurulent expectoration. He was put under the use of the cod-liver oil, and the improvement was both marked and rapid. He continued for six months, and with slight intermission, remains in good health.

Jane Orrin, aged 29, slight stature, and dark complexion; has been ill for three years, with cough and expectoration; has had several attacks of hæmoptysis, and was treated at the Consumption Hospital at Brompton, and sent from there incurable, to the Colchester Union Infirmary. She was then emaciated; severe cough; mucopurulent expectoration; laryngeal hoarseness; under left clavicle distinct pectoriloquy, with dulness on percussion on both sides; respiratory murmur inaudible in places. She was immediately put under the use of cod-liver oil, and has continued it since, with the intermission of two attacks of hæmoptysis, after suitable treatment for which, the oil was again commenced. She is now

become quite fat; little or no cough; expectoration lessened; laryngeal hoarseness much improved; the physical signs, however, continue, with pectoriloquy on both sides.

Thomas Vaughan, aged 16, slight stature; light complexion; belongs to a phthisical family. About two years ago, whilst resident at Hadleigh, was attacked with pain in the chest, cough and copious expectoration. After some months' treatment, he was removed to the Colchester Hospital, where he remained some months under my friend Dr. Chambers, now of London, and while there, he was suffering from chronic rheumatism and pleuritis of the right lung and pleura. Dr. Chambers states that there was considerable contraction of the right side, and the heart was drawn much to the right of its normal position. He came under my care in the Colchester Union Infirmary about a twelvemonth ago, he was then much emaciated, with hectic, and profuse perspirations, and mucopurulent expectoration. The physical signs were, general dulness on percussion, with large crepitation, and increased vocal resonance; immediately to the left of the spine, and between it and the scapula, a slight curvature of the upper dorsal vertebrae was perceived. He was put under the use of cod-liver oil, and rapid improvement took place. About six months ago he coughed up a small disk of bone, of a spongy texture; and twice since small pieces of bone, of a similar nature, have been coughed up. Dr. Duncan, who has closely watched the case with me, writes me to the following effect:—"I saw him on the 12th of this month, his curvature, owing to the absorption of more or less of the body of the diseased vertebrae, has increased; dulness on percussion; bruits in a very modified degree; there is no pectoriloquy; no mucous râles, these are replaced by very weak vesicular murmur; and slight tubular breathing. The boy has improved in every respect."

Mary Ann Pitchell, aged 38, single, has been an invalid six years. About three years ago suffered from extensive scrofulous ulcerations of the left knee-joint, also left elbow-joint, and enlargement of cervical glands, with ulcers. Was discharged from the Colchester hospital two years ago, when she came under my charge at the Union Infirmary; she was then much emaciated, appetite bad, colliquative sweats, with profuse discharge from ulcerations. Ordered the use of cod-liver oil, with suitable local treatment. She has continued the use of it until within the last six months, with great improvement to her general health. Ulcerations quite healed, but remains a cripple from ankylosed knee and elbow-joints.

Robert Scott, aged 8, has been suffering for the last four years from morbus coxarius. He is constantly taking the cod-liver oil, which keeps him in good health. About a twelvemonth ago had a large gluteal abscess burst, which confined him to bed for some months, from which, after suitable treatment, he recovered, and recommenced his old friend. He is now quite well, with the exception of shortening and contraction of the left leg.

William Last, aged 11, another case of morbus coxarius at present under treatment. A large abscess burst over the great trochanter. He is now taking the cod-liver oil, with seeming benefit.

Dr. Duncan has been kind enough to send me the three following cases in which cod-liver oil was administered :—

Thomas Funnell, aged 20, ill four years; has had hæmoptysis; dulness under either clavicle; gurgling and pectoriloquy over a considerable spot in the left sub-clavicular region; tubular breathing very generally heard on the right side, above the mammaræ. He took *oleum jecoris* from 30th of November, 1848, until March 5th, 1849. With the exception of one fit of purging, he remained in *statu quo*.

Mary Millar, a child half starved, December 2nd, 1848. Cough, tubular breathing, and increased vocal resonance below the right nipple; dulness below the left clavicle, and weak vesicular murmur. Blister to right side, and *oleum jecoris*. Discharged in April. Right side relieved, the state of the left lung persisting.

James Vale, 27. Hæmoptysis; gradual emaciation; pectoriloquy under left clavicle. Admitted August 12th, 1848. After some little inflammatory action, which was subdued by Antim. Pot. Tart., has been taking the oil up to the present day. He is in the same state; physical signs have not altered.

Proceedings of Societies.

LANCASHIRE AND CHESHIRE BRANCH MEETING.

The Thirteenth Anniversary Meeting of the Lancashire and Cheshire (late Newton) Branch of the Provincial Medical and Surgical Association, was held at the Albion Hotel, Manchester, June 28th, 1849. SIR ARNOLD KNIGHT, M.D., of Liverpool, in the Chair.

A Council meeting was held at eleven o'clock, when the new rules of the Branch, as recommended by the Committee, were approved, and the following gentlemen belonging to the Parent Association enrolled members of the Branch:—Mr. Robert Rigge, of Woolton, near Liverpool; H. H. Broughton, M.D., F.L.S., of Preston, (late of Dobcross;) Mr. Richard Flint, of Stockport; Mr. Henry Halkyard, of Mossley, near Lees; Mr. Thomas Dorrington, of Manchester; Mr. John Brooke, of Stockport.

The Secretary reported that Mr. Garstang, of Bolton; Mr. Stott, of Manchester; Mr. Welsby, of Prescott; Mr. Dumville, of Manchester; and Dr. Swift, of Liverpool; had retired from the Branch Association during the past year, and that Dr. Carson, of Liverpool, had died during the same period.

At twelve o'clock the general meeting took place, when Sir Arnold Knight, M.D., was called to the chair, and expressed his regret that the President of the year, Mr. Thorpe, of Manchester, was prevented attending in consequence of his continued indisposition.

The following members, or gentlemen introduced as visitors, were present:—Dr. Lyon, Dr. M. A. Eason Wilkinson, Dr. Radford, Dr. Pincoffs, Dr. Black, Dr. Bell, Mr. Turner, Mr. Hatton, Mr. W. C. Williamson, Mr. Dorrington, Mr. James Whitehead, Mr. Lambert, Mr. Lund, Mr. Crompton, Mr. R. H. M'Keand, Mr.

Kirkman, Mr. Richmond, Mr. Winterbottom, and Mr. Bowring, of Manchester; Dr. Macrorie, Dr. Watson, Dr. Dickinson, and Mr. Burrows, of Liverpool; Mr. J. A. Pearson, and Mr. Robert Rigge, of Woolton; Mr. Richard Flint and Mr. Brooke, of Stockport; Mr. Sharpe, Warrington; Mr. Wilson, Runcorn; Mr. Fawcitt, Oldham; Dr. Broughton, Preston; Dr. Welsh, Eccles; Mr. Halkyard, Mossley; Mr. Manley, Tyldesley; Mr. Pegge and Mr. Inge, Newton Heath; and Dr. Darcus, 30th Regt.

The Secretary then read the following

REPORT OF THE COUNCIL.

It is customary for the retiring Council to present to the Annual Meeting some report of the proceedings of the past year. In conformity with this obligation your Council would offer the following brief remarks upon the events and objects of the year now past; wherein, if all has not been done which might have been expected, or hoped;—if much has even been left undone, and little in fact accomplished;—yet they trust that what has been attended to in endeavours to further the objects of the Branch Association, will meet with the approbation of this meeting, and may eventually prove of real service to the end which all have in view,—by inducing a large proportion of the able practitioners, scattered throughout Lancashire and Cheshire, to give their active co-operation in promoting the scientific and material interests of the profession, in combination with friendly social intercourse amongst its members.

There has been for several years a growing conviction that some change in the constitution of this Association, including a change in the place of meeting, might be found conducive to the more complete realization of those objects aimed at by the early and estimable founders of our Branch. And it will be remembered, that at the last annual meeting a Special Committee was appointed, for the purpose of considering this question, and reporting upon it at the present meeting. The result of the deliberations of that Committee has been already circulated amongst the members of our Association, in the form of rules proposed for its future government, in which it seems to have been the study of the Committee to deviate no farther from the original rules than the change of circumstances rendered necessary. The Council request members to observe, that the principal alterations consist in,—1st, a change of name; 2nd, a variable place of meeting, which has been found very advantageous in other districts; 3rd, a limited number of members of Council, admitting of annual renovation; and, 4th, the appointment of only one principal secretary, which, it is believed, will very much facilitate the prompt transaction of business. With these few remarks your Council recommend the adoption of the proposed rules, subject to such alterations, verbal or otherwise, as to the members present may seem expedient.

Your Council have, on former occasions, adverted with pain to the great accumulation of arrears due from several members of this Branch, and have now to regret their inability to report any improvement in this department of finance. In their opinion the time is arrived when it will be necessary to adopt some conclusive determination with regard to these arrears.

Subjoined is a general statement of the accounts for the past year:—

Balance due to the Secretary, June, 1848	0	19	3½
Bills owing and since paid	4	10	6
Paid for paper, envelopes, &c.	0	5	0
To postages during the year	2	10	0
	8	4	9½
To subscriptions received during the past year	5	2	6

June 28th, 1849, balance due to Secretary .. 3 2 3½

The Report having been read, it was unanimously resolved on the motion of Dr. Wilkinson, of Manchester, seconded by Mr. Wilson, of Runcorn,—“That the Report of the Council now read be adopted and transmitted to the Secretary of the Provincial Medical and Surgical Association for publication in the Journal, together with the proceedings of this meeting.”

The Secretary now read the new code of laws for the future management of the Branch, and it was resolved on the motion of Mr. Turner, of Manchester, seconded by Dr. Macrorie, of Liverpool,—“That the rules, as revised by the Committee appointed at the last annual meeting, and approved by the Council, with the addition and amendments now proposed, be adopted, printed, and circulated to the members of this Branch, when sanctioned by the General Council of the Parent Association at Worcester.”

Moved by Dr. Macrorie, of Liverpool, and seconded by Dr. Pincoffs, of Manchester, and resolved,—“That the following gentlemen constitute the officers of the Council for the current year:—*President*: Robert Thorpe Esq., Manchester. *Vice Presidents*: James Kendrick, M.D., Warrington; J. Armitage Pearson, Esq., Woolton, near Liverpool. Samuel Crompton, Esq., Edmund Lyon, M.D., Thomas Radford, M.D. Thomas Turner, Esq., James Whitehead, Esq., Wm. James Wilson, Esq., Manchester; John Burrows, Esq., Joseph Dickinson, M.D., W. H. Duncan, M.D., Sir Arnold Knight, M.D., R. W. Scott, M.D., G. C. Watson, M.D., Liverpool; Richard Broadbent, Esq., Altringham; James Edwards, M.D., Philips Jones, M.D., Chester; George Dagliesh, Esq., Wigan; Thomas Fawsitt, Esq., Oldham; J. M. Robinson, Esq., Bolton-le-Moors; John Sharp, Esq., Warrington; Henry Wilson, Esq., Runcorn. *General Secretary*: John Hatton, Esq., Manchester. *Local Secretaries*: G. C. Watson, M.D., for Liverpool; John Sharp, Esq., for Warrington; J. M. Robinson, Esq., for Bolton.”

Moved by Mr. Hatton, seconded by Mr. Fawsitt, of Oldham, and resolved,—“That the next annual meeting of this Branch be held in Liverpool, and that W. H. Duncan, M.D., of Liverpool, be elected President, and Thomas Radford, M.D., of Manchester, and James Edwards, M.D., of Chester, Vice-Presidents, for the ensuing year.”

Moved by Mr. Hatton, seconded by Mr. Pearson, of Woolton,—“That the thanks of this meeting be given to the President, Sir Arnold Knight, M.D., and to the Vice-Presidents, Mr. J. A. Ransome, of Manchester, and Mr. Gaskell, of St. Helens, for their services during the past year.”

Moved by Mr. Sharp, seconded by Mr. Wilson, of Runcorn,—“That the thanks of this meeting be given to the Council for their services during the past year.”

Moved by Dr. Lyon, seconded by Dr. Macrorie, and resolved,—“That this meeting deeply laments the loss sustained by the Provincial Medical and Surgical Association in the untimely death of its late courteous and

indefatigable Secretary, Dr. Streeten.”

Moved by Dr. Watson, seconded by Mr. Burrows, and resolved,—“That the following petition, as recommended by the National Society, for the Abolition of Intra-mural Burials in Towns be adopted, signed by the Chairman and gentlemen present, and forwarded to the House of Commons for presentation.”

“To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament Assembled,

“Sheweth,—

“That your Petitioners have, during many years, had just cause for complaint, arising not only from the number, but the overcharged state of the Metropolitan and other burial places.

“That your Petitioners have a firm conviction, that the numerous and incalculable evils inseparable from a state of things at once destructive to health, degrading to religion, and insulting to humanity, will never be remedied unless your Honourable House interposes its authority.

“That your Petitioners desire to express their unfeigned satisfaction that this national grievance was the subject of inquiry by a Committee of your Honourable House in the year 1842, who reported that ‘after a long and patient investigation, your Committee cannot arrive at any other conclusion than that the nuisance of interments in large towns, and the injury arising to the health of the community from the practice, are fully proved.’ That, from the evidence adduced before the Committee, and many subsequent exposures of the terrible consequences resulting and necessarily arising from the present system of interment, your Petitioners venture to express their earnest desire, that the burial of the dead in the midst of the living may be instantly and for ever prohibited, by the closing of all burial places in cities and towns, and by the adoption of such measures as may secure the public from the injurious and debasing practices at present existing.

“And your Petitioners will ever pray.”

Several communications were then read, an abstract of which will appear in a future number of this Journal.

The members afterwards sat down to a sumptuous dinner, provided in the best style by Mr. Johnson, of the Albion.

Amongst the list of toasts were—“The Queen, the Duchess of Lancaster”—“Prince Albert and the Royal Family”—“The Provincial Medical and Surgical Association,” responded to by Dr. Bell—“The Lancashire and Cheshire Branch of the Provincial Medical and Surgical Association, and Dr. Lyon”—“The late President and Vice-Presidents, Sir Arnold Knight, and Mr. Ransome and Mr. Gaskell”—“The President and Vice-Presidents of the year, Mr. Thorpe, and Dr. Kendrick and Mr. J. A. Pearson”—“The Council and Secretary of the Branch, and Mr. Hatton”—“The Medical Charities of the Counties of Lancaster and Cheshire”—“The Health of Dr. Hastings, of Worcester, the Parent and Founder of the Provincial Medical and Surgical Association”—“The Visitors.”

This terminated one of the most successful meetings of the Branch that has been held for several years, and the members separated with the conviction that the opportunity thus afforded of meeting each other from

distant quarters was greatly conducive to the maintenance of that mutual respect and unanimity which ought to cement together all pursuing a liberal profession.

ARNOLD KNIGHT, Knt., M.D., Chairman.

JOHN HATTON, Hon. Sec.

BIRMINGHAM PATHOLOGICAL SOCIETY.*

March 1, 1849.

D. W. CROMPTON, Esq., in the Chair.

ALBUMINOUS FLUID OF EXTREME TENACITY REMOVED FROM A MULTIFOCULAR OVARIAN CYST.

Mr. F. Elkington described the case. The fluid was taken from a patient aged 30. The total quantity evacuated amounted to nearly six gallons. The fluid was more tenacious than white of egg, which it otherwise much resembled. By heat or nitric acid it became white and solid, just as coagulated white of egg. It mixed readily with Liquor Potasse, imperfectly with water. Examined by the microscope, either between plates of glass, or in a glass cell, it presented nothing but peculiar cell-like bodies, without nuclei, containing one or many minute bright globules, like oil globules. These bodies were in large numbers, they varied from 1-1430 to 1-2500th of an inch diameter. As the operation of ovariectomy was intended to be performed, the history of the case was deferred.

SCIRRHUS OF THE MAMMA THREE YEARS AND A HALF AFTER REMOVAL.

Dr. Russell narrated the following case:—

September 20th, 1845. I removed a scirrhous mamma from Mrs. —, aged 45; it had been coming three or four years, and appeared first as a small hard tumour, a little to the left of the left mamma. During the last six months it has been increasing very rapidly, has been often very painful, and the skin has been becoming puckered. She is tall and very spare. Husband just dead. Has enjoyed good health, had one child fourteen years ago, still menstruates, is a nurse, and has worked very hard. There is very little fat in either breast, but the left (the diseased one,) is decidedly smaller than the other one. The tumour which occupies the gland is very superficial, about one inch and a half in diameter, of stony hardness; the nipple drawn in and above; the skin pinched; the tumour quite moveable on the ribs; one enlarged gland in the axilla, apparently quite unconnected with the disease.

The tumour was removed without difficulty; a large portion of skin was taken with it; the pectoral muscle was extensively bared. We discovered a hard cord running from the tumour towards the axilla; this I removed as completely as I could. The operation was attended with much pain, and after it was ended the patient complained of so much severe pain in the breast and in the back that we were obliged to administer a grain of opium. Two arteries bled very profusely.

24th. The upper part of the wound, where the integuments have been brought together, is nearly united; the

lower two-thirds, where the lips of the wound were not brought in apposition, are open, and display no action. She has complained from time to time of much very severe shooting pain in different parts of the wound. Health and appetite tolerable. In eight days after the operation she was about. The wound healed kindly, but during the process of healing she suffered from very sharp shooting pain towards the axilla, and from extreme tenderness; a touch on the outside of the wound, or on the wound, produced the effect of an electric shock. Some hardness was evident in the situation of the cord spoken of above, but this diminished, though it did not go away.

January, 1846. She has applied once or twice since with very severe pain at the lower part of the back and in the side, the former much aggravated by moving. She describes it as most excruciating. The cicatrix is entire, but on the inner side is a very hard prominence. The breast is sometimes tender, and rather painful. She has been able to undertake the duties of a nurse.

January 5th, 1849. She called on me; looks in excellent health; is now a cook; has been quite well; the cicatrix perfectly healthy, free from all tenderness, smooth and soft, and the entire integument in quite a healthy condition. She has only menstruated once since the operation, and that was soon after it. She is now complaining of headache, and of pain in the left hypochondrium on walking; these pains are only of a week's duration; there is one small enlarged gland at the apex of the axilla, smaller than a hazel nut, and free from any tenderness.

A CASE OF OLD STRICTURE OF THE URETHRA: THE PERINEUM OPENED TO RELIEVE RETENTION.

Dr. Russell illustrated by preparation, and gave the particulars of the following case:—

A strong, well-made, middle-aged man, of intemperate habits. He has for some years been the subject of stricture of the urethra, but had been in the habit of relieving himself by occasionally passing a bougie. On the present occasion, however, after having been drinking deeply, his water was retained, and he was totally unable to relieve himself. He neglected to apply for medical relief until the rapidly increasing severity of his symptoms compelled him.

During the morning of the following day, his symptoms hourly became more urgent, and his powers seemed to be fast sinking; pulse was small; countenance pale, depressed, and anxious; skin cold, and covered with perspiration; respiration laboured. He lay in a stupid state, without uttering a word, except in reply to questions, and then responding as briefly as possible, and in a voice scarcely audible. Would take no nourishment.

At this time, three, p.m., it was found impossible to pass a catheter of any size further than one and a half or two inches. A probe appeared to pass through the stricture, but upon examination it was found to have slipped through into the engorged cellular texture of the penis, and its point could be felt immediately beneath the integument. Under these circumstances an operation was immediately performed in the following manner:—A director was passed into the urethra as far as possible, and an incision about one inch and a half in length

was made upon its part through the raphe, beginning at the root of the penis. The cellular tissue was very much gorged with urine. The urethra having been thus opened, the incision was continued downwards to the extent of three-quarters of an inch, in the hope of being able to pass a catheter into the bladder from the opening thus made, but the existence of strictures nearer to the bladder rendered this impracticable, and the operation, in its present state, ineffectual. A second incision was therefore made in the perineum, and the urethra having been found, with some difficulty, it was opened, and a female catheter passed thence into the bladder. Though it was quite evident that the instrument had reached the bladder, only from two ounces to three ounces of urine escaped. The next step was fairly to divide the portion of the urethra between the two wounds, which was still constricted, from the wound in the perineum. This having been accomplished, an elastic bougie was passed along the urethra from the natural opening, and was drawn out at the wound in the perineum, in the hope of forming an artificial urethra. The patient lost but little blood during the operation, but the exhaustion continued, and although attempts were made to revive him by the administration of brandy and ammonia, he gradually sunk till 11 p.m., when he died.

Section cadaveris twelve hours after death.—The muscles were red and very firm. The integuments having been dissected from the penis, that organ, together with the bladder was removed from the body. The penis was very large, being of the size usually attained by the organ during erection. The urethra was entire with the exception of the two openings, which had been made in it; it had not been divided in the intervening portion as was intended, so that the bougie had passed external to the passage, and the incision which it was supposed had divided the strictures, had merely been made in the neighbouring cellular membrane. The calibre of the urethra was very much diminished, and its walls were hypertrophied to many times their natural thickness, and almost resembled ligaments in their consistence. Immediately below the first incision the lining membrane was greatly thickened, so as to render the passage almost impervious in the relaxed state of the parts, and it is probable that during the patient's life the calibre would be entirely closed. Above the stricture the urethra was of a black colour, apparently from blood extravasated behind the lining membrane. Another stricture existed just above the second incision, and immediately below it was a false passage, caused by an enlarged lacuna. The capacity of the bladder was much reduced, it could not contain more than half a pint of fluid, its walls were enormously thickened, and the mucous membrane very œdematous, and the colour of coffee grounds.

Dr. Russell was indebted to a friend for witnessing the case, and for the opportunity of making the preceding notes. He regretted that he had not the kidneys in addition to the other parts.

Foreign Department.

ON THE

VARIOUS MODES OF TREATING CHOLERA

NOW IN FORCE IN THE HOSPITALS OF PARIS.

We continue our account of the French treatment of cholera, by the following more detailed description of the different methods now employed in the Parisian Hospitals, by the most respectable physicians of the day. The first we shall notice is the—

Hotel Dieu.

The inmates of this hospital are in general the destitute of both sexes, and all ages. It has the reputation of being one of the least salubrious establishments in Paris, being situated on the very banks of the Seine, and its wards being ill-ventilated and over-crowded. The medical staff is, on the contrary, one of the most enlightened, consisting of men who base their practice on the doctrines of physiological and pathological science, so far as its principles are fairly established. The practice of these men is, therefore, as might be expected, tolerably uniform, and is guided by the indications afforded by the principal groups of symptoms of the disease.

Thus, for the premonitory diarrhœa, the majority employ opium and astringents, and reject emetico-cathartics. For the vomiting they give ice and iced seltzer water; for the collapse, external warmth, and stimulants internally; for the secondary fever and local symptoms, local bleeding, &c. We see, therefore, that among the physicians of the Hotel Dieu, there are no cholera specifics, and no pure empiricism; but we will glance at their individual treatment more in detail.

Chomel recognizes several forms of cholera, as the nervous form, the algide, the gastro-intestinal, and the inflammatory; the first characterized by the predominance of pain and cramps; the second, by the diminution of temperature, and the embarrassment in the organs of circulation and respiration; the third, by the abundance of the evacuations; and the last, which is rare, by symptoms of acute gastritis or dysentery.

In the first form he gives opium either by mouth or rectum; in the second he applies external warmth, preferring the hot-air bath to other modes. Internally he gives hot tea, punch, &c. If the patient complains of a sensation of intense internal heat, he either omits the stimulants altogether, or gives ice internally in conjunction.

Vomiting and diarrhœa are combated by ice, bismuth, and by astringents. If the respiration is much embarrassed he bleeds.

Louis treats cholera much in the same manner, but applies the remedies more regularly, and with less regard to the supposed varieties of the disease.

Rostan prefers hot-water baths, of 40° cent., to hot air or vapour, at the same time he gives stimulants, as brandy and æther, internally, and friction with stimulating embrocations. Under the impression that the

secretions are acid, he administers ammonia or lime-water. If vomiting persists in spite of opiates, he applies a large blister to the epigastrium.

Martin Solon. This physician adds to the above treatment means calculated to modify the crisis of the blood. He first tried salt, but being disappointed in the results, he now has recourse to the sesquicarbonate of ammonia. In the suspension of the diarrhœa, he administers enemata, containing bismuth.

M. Honoré adopted the above system with little or no modification, but his successor, *M. Leger*, entirely changed the routine, substituting the saline treatment of Stevens.

M. Tardieu at one time tried sea-water, in doses of a table-spoonful at short intervals, but finding no great superiority in the natural over the artificial salt-water, he returned to the plan followed by *M. Leger*.

The results of the treatment in the Hotel Dieu are—210 deaths out of 415 cases, 87 remaining under treatment.

La Charité.

The sanitary condition of this hospital is but little in advance of that of the Hotel Dieu, but its inmates are in general of a class somewhat less impoverished, and consequently more robust. The physicians are men of good reputation, but exhibit less uniformity in their treatment than those of the Hotel Dieu.

M. Fouquier gives an emetic in the onset, after which he trusts to stimulants and opium.

M. Rayer bleeds when practicable, cups the abdomen repeatedly, and gives opium freely by mouth and per anum.

M. Cruvelhier has no fixed method of treatment; he gives aromatic stimulants, with opiates, and is partial to repeated sinapisms. He was one of the first to try the *stachys*, but found its value much exaggerated.

M. Bouillaud adopts the saline treatment, and eschews blood-letting in every shape.

M. Briquet directs all his attention to the removal and prevention of the collapse, attending at the same time to the suspension of the evacuations. For these purposes he uses the hot-air bath, alcoholic and aromatic stimulants and sinapisms. If these fail, he resorts to the alternate use of iced and hot drinks. Latterly he has tried emetics of ipecacuanha.

The total number of cases submitted to treatment in La Charité is 274, of which 154 proved fatal, 57 were cured, and 63 remained under treatment.

Hospital of Val-de-Grace.

This hospital differs from the preceding in being a military establishment, and having for its inmates men only, and those generally robust and well fed. The hospital itself is exceedingly well situated.

M. Levy considers that the treatment of cholera can only be conducted on natural principles during the premonitory stage and the stage of reaction. The cold stage admits only of empirical measures. In the latter he has tried a variety of medicines—as Indian hemp, strychnine, turpentine, chloroform, &c., but without success.

The statistics of the disease in this hospital are

decidedly favourable as compared with the others, which may be attributed partly to the robust condition of the patients, but is chiefly due to the surveillance which is exercised over the military, and obliges them to report themselves on the slightest symptoms of illness. The numbers are 227; deaths 57; under treatment 72.

La Pitié.

La Pitié is a well-constructed and airy building, but the patients are derived from the most abject classes. The treatment adopted by its officers exhibits considerable difference.

M. Serres considers cholera as a variety of pernicious typhus, and therefore adopts the mercurial treatment, which he regards as the specific treatment of typhoid affections. He at the same time attends to the urgent symptoms—as vomiting and purging, for which he administers effervescent medicines and camphorated enemata.

M. Piorry insists strongly on hygienic precautions, as the only means of preventing the spreading of the disease. His treatment consists in large cold-water enemata, with cold drinks *ad libitum*, and ice to the abdomen. In the stage of collapse he resorts to the vapour bath and internal stimulants.

M. Gendrin is an advocate for blood-letting at the outset of the premonitory symptoms, as also in the stage of collapse if possible; he at the same time gives stimulants internally. The number of cases treated at La Pitié were 272; of which there were 137 deaths and 64 remaining under treatment.

St. Louis.

M. Gibert has followed almost exclusively the system called *rational*, which consists in fulfilling the various therapeutic indications as they arise. Thus he treats the premonitory diarrhœa, by quiet, by sedatives, and muellaginous drinks. The cold stage is treated by external warmth and external stimulants. The cramps are met by the exhibition of laudanum frictions. *M. Gibert* does not employ bleeding, or emetics, or in fact any kind of empirical treatment.

M. Moissonet trusts to the salt treatment. The numbers admitted into this hospital were 237, of which 113 died.

Hopital Bonjon.

This is one of the finest hospitals in Paris both as to situation and structure. The patients are mostly from the environs, but are poor and ill fed.

M. Legroux trusts to external warmth, and internal stimulation by hot drinks, with or without the addition of alcohol. In some cases he bleeds before the cold stage is completely established, and in the stage of reaction. If the vomiting is urgent, he applies blisters to the epigastrium. For the diarrhœa he prescribes enemata of nitrate of silver.

In this hospital there were 133 cases and 83 deaths.

The Salpêtrière.

The account of the progress of cholera in this establishment requires a special consideration. This is the largest hospital in Paris, containing at least

5000 inmates, who are mostly old and infirm individuals, many the subject of chronic disease, and of epilepsy, or confirmed lunatics. As might be anticipated, therefore, the disease has here committed great ravages. The prevailing theory among the medical staff is, that cholera is a disease, *sui generis*, requiring a special treatment.

M. Guillot, as did his colleagues, at the commencement of the epidemic, employed external and internal stimulants, but he speedily renounced this method, on account of his want of success. Subsequently he adopted the following:—

In slight cases cataplasms to the abdomen, enemata of rhatany root, hot-air baths; in severer cases, in addition to this, he gives the sulphate of ammonia, under the idea that it not only favours diaphoresis, but puts a stop to the fermentation, which is by many looked upon as the essence of the malady; he, at the same time, gives 50 centigrammes of calomel every ten minutes. He allows the patient to drink plentifully of rice water; in some instances he also gives mercury by enema.

Finding these means fail, he allowed a homœopathic compeer to try his infinitesimals in a given number of cases, all of which died.

M. Barth prescribed astringents and opiates for the vomiting and diarrhœa, but finally resorted to the nitrate of silver alone, which he found in many cases to have the power of speedily checking the evacuations. Nitrate of silver was also exhibited by injection. In the stage of collapse he gives Cannabis Indica and common salt, both by mouth and rectum.

M. Baillarger at first adopted the stimulant plan, which he afterwards abandoned for the saline. He was one of the first to try the stachys anatolica, from which so much was anticipated.

We need not further follow the different systems pursued in this hospital, the inefficacy of all of which is sufficiently manifest in the following *resumé* of the cases.

There were admitted up to May the 4th, 840; of these, the deaths were 602.

[We shall give the farther experience of the above hospitals in a future number of the Journal, should their reports prove interesting; in the meantime we would call our readers' attention to the significant fact, that at the commencement of the epidemic the mortality under every treatment, from the most heroic to the most inane—that of homœopathy—has been steadily 1 in 2, or thereabouts. We also derive the information that the premonitory symptoms, if attended to at their first appearance, are readily suspended,—a circumstance which cannot be too strongly impressed on the minds, both of the profession and the public.—Ed.]

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DE MEDECINE, PARIS.

CHOLERA.

As might reasonably be expected, much of the time of the Academy has been recently taken up with the subject of cholera, which is at this time committing

fearful ravages in Paris. Two points for discussion in particular were mooted, that of the existence of premonitory symptoms, and the eternal question of contagion. M. Gilbert declaimed with vigour against the doctrine of M. Guerin, that *diarrhœa is cholera*. The former affirmed, as a proof that it was not so, that whenever cholera is epidemic, there are always numerous cases of diarrhœa, which do not merge into cholera.

The second question is one of great gravity. M. Guerin supported the doctrine, adducing the evidence of M. Blanchard, who stated that the disease broke out in the village of Pogent, on the arrival of a bevy of nurses, two of whom had the disease. He also mentioned that several cases appeared at Hamel, immediately after the arrival of a soldier from Paris, with the malady upon him. These facts did not, however, make much impression on the Academy, but were set down as coincidences merely. As in this country there were found speakers who were averse to discussing the question, fearing lest the public should assume the side of contagion, and thus be scared away from Paris.

The Academy received information of two new remedies for cholera:—one, the stachys anatolica; the other, the common truffle; but reasonably enough, paid but little attention to them.

M. Mialhe having analysed the excretions of cholera, has discovered that they do not contain albumen, but a substance which he calls *albuminose*, which does not coagulate by heat or nitric acid. This statement was negatived by M. Masselot, who found that the choleraic evacuations contained an abundance of a precipitate, both with heat and acid. It is strange that there should be any doubt upon a matter so easy of decision.

M. Maisonneuve gave the details of a very severe operation for the enucleation of a fibrous tumour of the uterus, in which it was necessary to incise the cervix extensively, and cut the tumour into several pieces before it could be removed.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DES SCIENCES, PARIS.

INFLUENCE OF THE NERVOUS SYSTEM ON THE SECRETION OF URINE.

M. Magendie announced a physiological discovery, made accidentally, by M. Bernard. It is to the effect that sugar can be made to appear in the urine, by wounding a certain part of the floor of the fourth ventricle of the brain. The point which it is necessary to injure in order to produce this effect, is one which corresponds to the organ of the pneumogastric nerve. —M. Lebert sent a memoir "On the Development of the Muscular Fibre of the Heart and the Voluntary Muscles in Vertebrate Animals." According to this author there are certain fundamental laws applicable to all classes of vertebrate animals. He distinguishes three periods in the development of muscle:—1. The primordial state, a globular blastema, the plastic globules being the same as those destined for the formation of other tissues. 2. The appearance in the midst of these globules of a certain number of

irregular bodies, which are the first visible traces of the muscular cylinders, and which the author names myogenic corpuscles. 3. Further development of these bodies, which become elongated, and more regular in shape. The next step is the appearance of longitudinal striæ and the transverse striæ, which are arranged in a parallel direction; at the same time the plastic globules which separate the cylinders disappear.

The Academy received a communication from M. Serres, proposing to treat cholera by the black sulphuret of mercury.

M. Pouchet, of Rouen, announced the discovery of an immense quantity of infusory animals (the *vibrio rugula*, of Müller,) in the evacuations of cholera patients. These are only to be found in the true rice-water stools.

General Retrospect.

PRACTICAL MEDICINE.

COFFEE IN HOOPING COUGH.

M. Guizot states in the *Union Médicale*, that a teaspoon or desert-spoonful of strong coffee, taken immediately after each meal, is a certain remedy for whooping cough, curing it in three or four days. To this, however, must be added, the use of roast meat instead of a milk and feculent diet. The discovery was made accidentally, but the case given in illustration is not of the most convincing kind.—*Revue Medico-Chirurg.*, Mars, 1849.

MATERIA MEDICA.

PREPARATION OF COLLODION AND CANTHARIDES.

This idea has occurred to M. Hirsch, a chemist of St. Petersburg, to combine the above substances so as to form a blistering fluid. It is made by digesting a pound of roughly powdered cantharides with a pint of sulphuric ether and three ounces of acetic ether. By this means a saturated solution of cantharides is obtained, to which twenty-five grains of explosive cotton are added. This fluid may be preserved in well-stoppered bottles. Its action is said to be more rapid than the ordinary vesications.—*Med. Zet. Russia*, and *Revue Med. Chirurg.*, Mars.

SURGERY.

SCROFULA.

M. Herard has written a long memoir on this subject, which concludes with the following deductions:—

Scrofula is a distinct disease. It is a general constitutional affection, almost always hereditary, having several local manifestations—as osteitis, abscess, ulcers, &c., but no special pathological product.

Enlarged glands, tuberculous abscess, tubercular infiltration of bones, mesenteric disease, phthisis pulmonalis, &c., are tuberculous diseases and not scrofulous.

The scrofulous and tubercular diathesis, are essentially distinct, although they have certain analogies.

Scrofula has no connection with rachitis. There is no certain mode of curing the disease; iodine is not a specific; the best treatment is that of attention to hygiene.—*Archives Générales*, Avril, 1849.

MIDWIFERY.

PUERPERAL CONVULSIONS: CHLOROFORM.

The following additional case of the subsidence of puerperal convulsions under chloroform is communicated by Professor Forget, of Strasbourg:—

The patient, aged 25, was confined of twins on the 14th of November, 1848. The labour presented nothing unusual. It had been noticed towards the close of pregnancy that she had anasarca of the lower extremities, and puffiness of the face. On the evening of the day of her delivery, (about seven o'clock,) she had a violent convulsive seizure, which lasted several minutes. A surgeon, who was called in, immediately bled her largely, and gave calomel and opium. At nine o'clock she had a second fit, of greater severity, and was bled again. At ten a third attack ensued. Between the fits the patient was restless and silent. M. Gros was called in at eleven p.m., and found the patient in the following condition:—Surface pallid and cold; head hot; face puffy; lips livid; respiration stertorous; strabismus; pulse 130, full. She was bled a third time, nauseated with antimony, and had leeches applied to the temples. At midnight she had a fit more frightful than any preceding, followed by delirious agitation. At the commencement of the next fit, chloroform was inhaled, upon a handkerchief, for a period of half a minute; the limbs immediately became relaxed, the respiration more regular and less stertorous, and the patient passed into a state of perfect quietude. The anæsthesia lasted ten minutes, after which the convulsions returned for about a minute, but of a slighter character. The inhalation was recommenced for about forty seconds, when resolution of the limbs became again complete. On the disappearance of the effects of the anæsthesia, the patient was this time calm and collected, and requested to be allowed to pass water; she then went to sleep, and remained quiet through the night. The convulsions did not return, and her convalescence took place as in ordinary cases.

In the above case we have an instance of puerperal convulsions becoming more and more severe under the use of the lancet, and ceasing, as if by enchantment, when chloroform was substituted. As far as an isolated fact is to be estimated, it places anæsthesia, under similar circumstances, in a very favourable light.—*Journ. de Med. and de Chirurg.*, Mars, 1849.

TOXICOLOGY.

IODINE IN THE TREATMENT OF SNAKE-BITES

Dr. Whitmore states (*North-Western Med. and Surg. Journ.*, Jan. 1849) that he has used the tincture of iodine in the cases of the bites of the rattle-snake, viper, and copper-head, in both man and beast, with the effect of putting an entire stop to the swelling and pain of the bitten part in from twelve to sixteen hours. He paints the bitten part over the whole swelling with three or four coats of the tincture twice daily, and should the swelling extend, which it almost always does after the first application, if made soon after the infliction of the wound, he repeats the application. The third application puts a stop to the extension of

the swelling, and three or four more will generally restore the limb to its natural state, except, perhaps, sensibility to the touch, and soreness of the muscles.—
American Journal of Medical Sciences.

ON THE PROPRIETY OF DISPENSING MEDICINES.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I am anxious to address to you a few observations on the subject of general practitioners dispensing their own prescriptions, a system to which you refer in the last number of your Journal. I think any fundamental alteration of the existing system would lead to very serious evils, for the following reasons:—

Firstly. There is a demand on the part of the public for general practitioners in the present sense of the word. If we cease to be such, we shall soon be swamped by the druggists. Where there is a demand, there will generally be a supply.

Secondly. Even if we kept our visiting and dispensing practice, we should lose very materially in one way by which at present our emoluments are very legitimately and very fairly added to. I allude to certain chronic ailments, such as dyspepsia, &c. In these cases we should seldom hear of our patients after the first visit. When their medicine wanted repeating, and even when the complaint recurred on a future occasion, they would go to the druggists and ask for "the medicine which had done them good before."

Thirdly. If we would avoid the loss we should be liable to from this cause, we should be forced to have recourse to the *per centage* system, which would be hardly so creditable as deriving a profit from our own pills and boluses.

Fourthly. If our present numbers and our present standing were to be maintained, without any diminution of our incomes, the public must be put to a greater expense for the sake of furnishing a profit to the druggists who would supply the medicines; and they would soon have the wit to perceive this.

Fifthly. We should have no check on bad drugs, or inefficiently compounded medicines, and we might be frequently wondering at the failure of our plans, when the real fault might lie with the omission of a drug from the medicine ordered, or with its adulteration.

Sixthly. We should be deprived of the power of practising a very necessary and innocent deception on our hypochondriacal and fanciful patients, in giving them some harmless *placebo*, instead of filling their stomachs with a farrago of drugs; for they would be sure to find out sooner or later, from their prescriptions, that they were not taking what they wished.

I agree with you most cordially in your opinion as to the depressing effects of constantly thinking about the *£ s. d.* Would to God we could do without thinking of them! Would to God that some system could be contrived which would render it unnecessary for us to think about them! We should all of us be but too happy if to the continued harass of mind and body to which we are subjected were not superadded the eternally recurring necessity of attending to our accounts; but unfortunately, like the rest of mankind, we have stomachs to fill and backs to clothe. The anxiety for remuneration is not a mere accident of our position as medical men; it is a necessity of our nature as material beings;

and that anxiety does not—cannot, at any rate it *ought* not, to detract from our standing as gentlemen. If we look at the thing practically do we see the pure physician or surgeon more exempt than ourselves from anxiety after the *£ s. d.*? Certainly not. The physician may indeed treat with Mr. Mantalini's lofty contempt the beggarly *d.*, but I have never met with one yet who did not look very grim when the *£* was tendered without the *s.* And very properly. This confounded necessity for looking after our material wants *must* intrude everywhere. It will do more; it will always render liable to the accusation of inconsistency those who would saddle on us exclusively the *auri sacra fames*. Thus, even "The Times" itself,—the *Thunderer*, in commenting on Dr. Berncastle's case, could express a great deal of virtuous indignation at "the man who could turn his back on the chamber of death because *five shillings* was not forthcoming," forgetting that not very long before it had been equally eloquent in its own defence about *five pence*, when the price of the paper was called in question. And it is without anything like a wish to be reproachful, that I would venture to call your own attention, Mr. Editor, to a notice, which even a purely scientific Journal like the one you so ably conduct is fain to append to every number, *that gentlemen will forward their arrears.*

No one laments it more than myself, but we *must* be paid.

I am, Sir,

Your obedient servant,

R. U. WEST.

Hogsthorpe, Lincolnshire,

July 2, 1849.

ON THE OMISSION OF ALLUSION TO MR. TOYNBEE'S RESEARCHES

IN MR. SWAYNE'S PAPER ON THE SYNOVIAL MEMBRANE.

To the Editor of the Provincial Medical and Surgical Journal,

Sir,—My paper, "On Synovial Membrane, &c.," in the last *Provincial Journal*, was accompanied by a note explanatory of my reasons for publishing it. This note I intended to have been published with the paper, but as I did not express a wish to that effect it was unfortunately omitted. I stated in it that the paper was read before the Bristol Microscopical Society, in July, 1845, but had not been published until now; and that my reason for now doing so, was, that it confirmed some more elaborate researches of Mr. Toynbee's, which had lately formed the subject of a paper in the *London Journal of Medicine*, and tended to set at rest a controverted point in anatomy. The conclusions which we both arrived at were the same, and were the result of nearly the same method of investigation. This, I trust, will explain the circumstance of my not having noticed Mr. Toynbee's paper, although I made a quotation from a paper by Dr. Leidy, which appeared in a more recent number of the same journal.

I am, Sir, yours very truly,

J. G. SWAYNE.

Clifton, July 2, 1849.

[We regret that the note in question never came into our possession, having been mislaid owing to the illness of Dr. Streeten.—ED. JOURN.]

Medical Intelligence.

QUEEN'S COLLEGE, BIRMINGHAM.

At the meeting of the Council, held on Tuesday, July 3rd, the Rev. Chancellor Law, the Vice-Principal, in the chair, Mr. George Bellasis Masfen, of Stafford, was enrolled in the list of Fellows, under the provisions of the Supplemental Charter. Mr. G. B. Masfen distinguished himself as the Warneford Medallist for the year 1847.

ROYAL COLLEGE OF PHYSICIANS.

The censors elect are Drs. Southey, Nairne, Barker, and Jeaffreson.

ROYAL COLLEGE OF SURGEONS.

MEMBERS OF THE COUNCIL.

The three following gentlemen were elected on the 5th instant:—Mr. Hodgson, Mr. Luke, and Mr. Wormald.

Gentlemen admitted Members on Friday, June 22nd, 1849:—Charles Alworthy, Newtown, Ards. co. Down; Edward Buckell, Chichester; Charles Hall Chambers, Lifford, Donegal; Walter Robert Crouch, Burton, Somerset; Robert Coker Nash Davies, Worcester; Thomas Francis, Welchpool, Montgomeryshire; Henry Christian Hare, Marlborough Villas, St. John's Wood; Harvey Ludlow, London; William Francis Noott, Portsmouth; Frederick William Napoleon Wilson, Newcastle-upon-Tyne; Dudley Clifton Wodsworth, Cambridge Street, Hyde Park.

Gentlemen admitted Members on Friday, June 29th, 1849:—H. Brown; C. Veral; J. B. Gilbertson; B. Hunt; J. R. Jenkins; H. Day; W. E. Strong; W. Gregory; C. A. Bisset.

Gentlemen admitted Members on Monday, July 2nd, 1849:—T. Carey; T. C. Spackman; A. J. Cridland; W. H. Thornton; J. S. Bristowe; C. Harper; A. Ball; W. A. Skinner; R. C. Todd; J. W. B. Steggall; J. Buncombe.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Members on Thursday, June 21st, 1849:—Robert Moore Bowman, Ripon, Yorkshire; Frederick Gardner, Pamyton, Devon; Joseph German, Derby; James Morris; Henry Watts, London.

Gentlemen admitted Members on Thursday, June 28th, 1849:—George Gordon Lawrence Williams, Llandoverly; Robert Tassell, Wye, near Ashford; Peter Allen, Smarden, near Cranbrook; William Jaynes, St. John's, Newfoundland; Luke Blumer, South Shields.

OBITUARY.

Died, on Saturday, July 1st, at the Rectory, Kemerton, the residence of his son, the Archdeacon of Bristol, Robert Disney Thorp, M.D., late of Leeds, in the 83rd year of his age.

July 15th, at Paris, of cholera, after a few hours' illness, James Scratchley, M.D., aged 65, late of the Royal Artillery, and Fellow of the Royal College of Surgeons.

July 16th, John Adam Townsend, surgeon, of 48, Finsbury Circus, aged 31.

July 19th, at his house, 105, Albany Street, Regent's Park, Mr. George Hall Lambert, surgeon-apothecary, in his 48th year.

BOOKS RECEIVED.

Memoirs of the Ganglia and Nerves of the Uterus. By Robert Lee, M.D., F.R.S., with Coloured Illustrations, by W. Perry. London: Churchill.

Practical Observations on the Diseases of the Uterus. By Robert Lee, M.D., F.R.S. Part II., with Coloured Illustrations, by Mr. Perry. London: Churchill. 4to, pp. 8.

Surgical Anatomy. By Joseph MacLise, Surgeon. Fasciculus II. and III. Imperial Folio. Plates. London: Churchill.

Pathology of the Human Eye. By John Dalrymple, F.R.C.S. Fasciculus II. London: Churchill. 1849. 4to. Coloured Plates.

Portraits of Diseases of the Skin. By Erasmus Wilson, F.R.S. Fasciculus V. London: Churchill. 1849. Folio. Coloured Plates.

The Retrospect of Medicine, being a Half-Yearly Journal, containing a Retrospective View of every Discovery and Practical Improvement in the Medical Sciences. Edited by W. Braithwaite. Vol. XIX. London: Simpkin Marshall and Co. 8vo, pp. 465.

The Half-Yearly Abstract of the Medical Sciences. Edited by W. H. Ranking, M.D., Cantab., late Physician to the Suffolk General Hospital. Vol. IX. London: Churchill. 8vo, pp. 400.

The Journal of Psychological Medicine. Edited by Forbes Winslow, M.D., July, 1849. London: Churchill.

The Monthly Journal and Retrospect of the Medical Sciences. London Editor—George E. Day, Fellow of the Royal College of Physicians, London. Edinburgh Editor—A. Eling, M.D.; W. T. Gairdner, M.D. Edinburgh: Sutherland and Knox. London: Churchill.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

SOUTH-WESTERN BRANCH MEETING.

The Annual Meeting of the South-Western District Branch of the Association will be held by direction of the President-elect, Dr. Pennell, on Wednesday, the 18th instant, at the Dispensary, Exeter. The Chair will be taken precisely at two o'clock.

TO CORRESPONDENTS.

Communications have been received from Mr. Newnham, Mr. Humphry, Mr. Husband, Diagnosis, Dr. Wardell, Mr. Daniell, Mr. R. Quain.

We have to apologize for the delay in the publication of several papers; but with the temporary authority only which we possess, we have not thought it right to make any selection from the many valuable papers transmitted. As far as possible each has been inserted in the order received, which must be our excuse to the Secretary of the Suffolk Branch, for the insertion of one contribution only this week, instead of all, as intended.

In consequence of the lamented death of Dr. Streeten, it is requested that all letters and communications be sent to J. H. Walsh, Esq., Foregate Street, Worcester. Parcels and books for review may be addressed to the care of Mr. Charchill, Princes Street, Soho.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON SURGERY,

DELIVERED IN THE

MEDICAL SCHOOL OF CAMBRIDGE.

By GEORGE MURRAY HUMPHRY, Esq.,

Downing College, Surgeon to Addenbrooke's Hospital.

LECTURE XI.

REPARATION: HEALING OF WOUNDS.

Reparative Inflammation; Reparation not necessarily attended with Inflammation; depends on Inherent Disposition of Tissues to revert to their natural state.

—Reparative power in Animals is proportionate to the simplicity of their Structure; the same is in higher Animals true with reference to Individual Tissues; Cicatrix is Vitally, as well as Physically, inferior to the original Tissues, but becomes gradually likened to them; its Contractile Tendency; it possesses Vessels and Nerves.—Reparation nearly allied to Development, is a step beyond Nutrition, and often fails where Nutrition is able to proceed.—Healing of Wounds immediately by the Blood; Healing by Reparative Inflammation, and Effusion of Lymph; reasons for calling this process Inflammatory; Qualities of the Lymph; Share taken by the Fibrin of Effused Blood in Reparation; Healing by Granulation.—Treatment of Wounds; indurated condition of Cicatrices sometimes rendering Extirpation necessary.

Hitherto our attention has been almost exclusively directed to the destructive results of inflammation, and I have said so much about them that you may, perhaps, have forgotten what I told you in the first lecture respecting its beneficial effects. I then endeavoured to explain, that although in its severe stages inflammation gives rise to much alteration and destruction of tissues, causing suppuration, ulceration, and mortification; nevertheless, in its slighter degrees it comes into operation as the process by which wounds are healed and ulcers closed. These slighter degrees I called the reparative, to distinguish them from those severer stages of the process which are appropriately named the destructive.

We will now enter at greater length upon the consideration of those kindly, and, perhaps, more interesting operations, by which the solutions of continuity resulting from accident or disease are repaired, and the integrity of the body is preserved.

Although I have spoken to you of reparative inflammation, meaning thereby an exaltation of the circulatory and nutritive forces, which approaches very closely to the condition of inflammation, strictly so called, and is often observed to attend upon the healing of wounds, the re-union of fractures, &c., I do not wish you to imagine that all reparation is of inflammatory nature, or indeed that inflammation is a necessary assistant to reparation; such would, I conceive, be quite a mistaken view of the subject. A more correct idea of the process of reparation will be formed by regarding it as one of the departments of nutrition very closely allied to development and growth, with which all animal structures are endued, in a greater or less degree, for the purpose of enabling them to preserve their integrity, in spite of the various accidents and disturbing agencies they encounter, as well as to resume their natural condition when they have been diverted from it. If this property be called into play in an unusual manner, it is attended with a corresponding activity of the circulatory and nutritive forces,—that kind of activity which I described to constitute the first stage of inflammation, and in this manner it is that inflammation becomes the handmaid of reparation.

Here I must observe that you are not to limit your ideas of reparation to those grander, coarser, and more palpable displays of it which effect the healing of wounds, and the re-union of fractures, for it has an influence of far more general and extensive operation than such a narrow view of its effects would lead you to imagine. Its salutary working is displayed (at least is attempted) whenever the healthy process of nutrition is in any way disturbed, or the natural structure of the body is in the slightest degree impaired; it is the power by which the weakened and altered tissues of an inflamed part are restored to their proper condition, and its influence is here no less remarkable, and no less beneficial, than in the closing of an abscess, or the formation of a cicatrix. An attack of retinitis, for instance, so alters the delicate structure of the tunic, and adds new and unnatural products to it, that it is unfitted to appreciate the feeble impressions caused by the rays of light; in a little time the inflammation subsides, but the nervous texture would remain imperfect were it not for this force of reparation implanted in it, and ever striving to restore the part to its natural condition.

This force of reparation, as we call it, is therefore

something more than the ordinary force of nutrition, for the latter would merely maintain the structure in a given state, whether that state were normal or otherwise; but the reparative force consists in an inherent tendency in living textures to revert to their natural standard, when they have been diverted from it; a tendency implanted in them from their earliest formation, associated with, and nearly allied to, the disposition which they manifest to assume a given shape and structure; of the same kind, in short, with development and growth, but happily more persistent than either of them.

Now, this force of reparation, constituting as it were a *corps de reserve* against extraordinary contingencies, is in a certain measure essential to the perfection, and indeed, to the continued existence, of the body, but it is possessed in very different degrees by the various classes of animals. It is most sparingly bestowed upon those animals and textures which are endowed with the highest organization; one of the penalties annexed to complexity of structure being a difficulty in returning to the healthy state when injured or otherwise disordered; and this imperfection of reparation, added to much liability to disorder, accounts for the fact that textures of high organization are so often the seat of disease.

The little fresh water polypes, which, from the exceeding simplicity of their structure, rank almost at the lowest end of the animal kingdom, are entirely composed of homogeneous substance, consisting of granules or cells, loosely connected by a semi-fluid matter. This structure is moulded into a particular shape, so as to form a bag or body; with an orifice surrounded by tentacula, and no traces of nerves, vessels, or other complicated textures, have been discovered in it, so that each particle of the polype possesses the same organization as every other part, and is independent of every other part for its nutrition and existence, although the several parts are all harmoniously united in the disposition to assume and to maintain a certain shape. So strong is this disposition, and so simple the process by which it is accommodated, that if one portion of the animal be separated from the rest, and continues to live, it will grow till it has attained the size and shape of the parent being. "If one of these animals," says Professor Owen, "be transversely bisected, both halves will survive, the cephalic one developing a terminal sucker, and the caudal one shooting forth a crown of tentacula, each moiety thus acquiring the characters of the perfect individual; and in a healthy polype the same phenomenon will take place if it be divided into ten pieces." Here then we have an instance of simplicity of structure co-existing with facility of reparation in the most remarkable manner.

Even in the planariae, where the internal cavity, as you see in this drawing, branches into a number of blind tubes, hollowed out in the parenchyma of the body, and a rudimentary vascular system is visible, multiplication by division may be effected in the same manner as in polypes; every piece, even if it be not more than the eighth or the tenth part of the creature, will become an entire animal. Some worms, the

segments of whose bodies represent in miniature the complete being, may in like manner be multiplied by division, but in the earth worm, where the functions are beginning to be concentrated into organs of greater importance, this property is much limited. If this animal be divided in halves, the anterior segment only survives. The wound caused by the operation is converted into an anus, but the posterior segment invariably perishes. It is, nevertheless, able to reproduce small portions of its body, and for if the seven or eight anterior rings only be cut off, although the mouth, the cephalic ganglia, and part of the œsophagus are thus destroyed, they have sometimes been observed to grow again. Crustaceans have the power of re-producing extremities. Thus, if the leg of a crab be removed, the wound closes, and a small cylindrical appendage sprouts from the cicatrix, which soon presents distinct articulations, resembling in miniature the limb it is destined to replace, and it continues to grow till it has attained its normal size. Imperfect attempts at re-producing limbs have even been observed in some reptiles,—in lizards, salamanders, frogs, and toads; and in fishes fins are occasionally re-formed.

In the higher vertebrata, and in man, where complexity of structure, and the mutual dependence of parts upon one another exist in the highest degree, we see nothing approaching to such attempts at re-producing members. The greatest efforts at reparation are confined to the closing of gaps, and the re-union of cut, broken, or lacerated parts. Even this is effected in an imperfect manner, for the new bond of connection is almost always of an inferior kind to that which it replaces, both in its physical and its vital qualities. It is with tissues, as I have told you is the case with animals, that those which possess the lowest organization, whose function is of a passive nature, retain the greatest power of repairing injuries; for instance, bone, the areolar, and fibrous tissues. Structures of higher organization and more active function are re-produced, in a very imperfect manner at the best. Generally they are not reproduced at all, but are replaced by some other tissue more easily formed, and of simpler structure. Thus a wound in a muscle or gland is repaired not by the formation of muscular or glandular, but by cellular or fibrous tissue, so that a white line of cicatrix always remains, denoting more or less clearly the situation of the injury. Skin and mucous membrane (the natural coverings of the body,) are necessarily more exposed to injury than other parts; each performs an active, as well as a passive, duty, for it furnishes certain secretions, besides resisting external agencies, and protecting the delicate structures beneath; and it is to be remarked, that each is re-produced after injury sufficiently well to fulfil its passive function, but the new product is, for the most part, defective with regard to any active duty. The cicatrix of skin, for instance, protects the subjacent parts well enough, and being furnished with cuticle, prevents injurious evaporation, but it is quite destitute of secretory apparatus; it contains no sweat glands, and no sebaceous follicles, and it has not that complicated form of cuticle which constitutes hair. It bears a near

resemblance to those portions of skin in which, owing to partial failure of original development, the texture remains imperfect. You have, perhaps, observed how much like cicatrix is the smooth line of integument devoid of hair and glands, surmounting an incomplete hare lip, and have possibly mistaken this imperfect portion of skin for the scar resulting from an ill-executed operation.

The cicatrix formed in mucous membranes is in like manner an imperfect substitute for the original structure, being composed merely of a layer of compressed areolar tissue, covered by a simple epithelium, and devoid of the glandulae and more complicated kinds of epithelium on which the peculiar functions of the membrane depend.

A cicatrix, once formed, is a component portion of the body, is nourished after the same manner, and governed by the same laws as the other parts; if they be growing it grows also, and grows in due proportion, so that the scar in the adult retains the same relative size which it had in the child; but it is weaker than the other tissues,—that is to say, the nutritive and vital forces corresponding with the imperfection of its physical structure, are less vigorous in it than in other parts, so that it more easily falls a prey to disease, and when inflamed it more quickly ulcerates and mortifies. This deficiency of the nutritive forces in the products of reparation is remarkably shown when any common cause occurs to affect the whole system. In scurvy, for instance, the scars of ulcers and wounds, and the callus of fractures, are the parts where the ravages of the disease generally first display themselves. A cancerous disease also not uncommonly begins in a cicatrix. In process of time, however, owing to the continual operation of the surrounding assimilative forces, and the natural disposition of parts to return to the healthy type, the cicatrix becomes gradually more and more likened, both in physical and vital properties, to the tissue which it replaces, so that scars are observed to wear out, and to be less and less subject to disease. This is particularly the case in the early periods of life, when the reparative, as well as the developmental, forces are in greatest activity. Some of you very likely bear, on your own persons, evidences of the truth of this remark in the faint traces now remaining of scars which were the result of severe wounds, and which you may remember to have been much more visible a few years ago. The changes going on in a fractured bone continued sometimes for many years after its re-union, which I shall point out to you when speaking upon the subject of fractures, are also remarkable instances of the inherent tendency of parts to revert to the natural standard of shape as well as structure.

Of the contractile quality of cicatrices I have already spoken. I said that, though occasionally productive of serious inconvenience, it nevertheless operates beneficially on the whole, by rendering necessary a smaller surface of the new and imperfect medium of union than would otherwise be required. I said that the contraction was probably due to the incomplete assimilation of the fibrin, from which cicatrices are formed; and I said that in course of time the

disposition to contract ceases to exist, so that if hindered for awhile it may be prevented altogether, and if the cicatrix be stretched after that time, it is probable that it will not resume its contracted state.

The minute blood-vessels are reproduced without difficulty; and the capillaries of cicatrix, though at first weak and dilated, become, after a little time, reduced to the ordinary size, and do not seem to differ in structure or function from the natural capillaries. The nerve-tubes also are formed in cicatrix sufficiently well to transmit the nervous influence. I may remark that the function of both these structures is, in a great measure, of a passive kind; and I am not aware that the active agent in generating nervous influence—the grey or vesicular matter—is reproduced under any circumstances.

The process of reparation is, without doubt, very closely allied to that of development, and in the lower animals both take place very much after the same manner, the completeness of the one being proportionate to the facility of the other. Thus the fresh-water polypes, which I adduced as such remarkable instances of the extent to which reparation is sometimes carried, are no less remarkable for their power of generation. They are sometimes propagated by spontaneous fission, and more commonly by gemmation. A little process is observed to project from some part of the animal, after the manner represented in this drawing, and the little process or bud increasing is gradually developed into a polype, and separating from the parent becomes an independent being. Whatever be the exciting cause of this gemmation, the reproduction of an entire animal from a detached fragment is but the counterpart of it, the injury sustained in its separation being the stimulus to the development which proceeds. Several of the worms are also propagated by spontaneous fission, between their component segments, each segment being developed into an entire animal, precisely in the same manner as when the division has been artificially produced. The formation and growth of new members in crustaceans, takes place very much after the mode, in which the members are originally developed. The shape, size, and structure of the new limb are determined by the same laws which presided over the formation of its predecessor, for the former generally attains without ever exceeding the dimensions of the latter. It seems that the forces by which the animal was originally formed, and reached its proper size, do not become extinct when the period of growth has terminated, though they lie in a dormant state. They continue as a *corpus de reserve*, at all times ready to come forward under particular emergencies to rebuild the structure they had contributed to erect, and to preserve the integrity of the animal in spite of the various accidents to which it is liable. Surely in the whole physical creation there is nothing more calculated to excite our wonder and admiration than this self-repairing power, which is peculiar to structures endued with life, and almost peculiar to the animal world.

In the nobler species of animals, where so much care is required to effect the generation of a new being, whose development and growth is a most

elaborate proceeding, the resultant, as it were, of the highest and most exquisite properties impressed upon matter by the Creator's power, we cannot marvel that reparation is a difficult and comparatively imperfect process. Nevertheless in them, as well as in the lower animals, the developmental forces do not become altogether extinct when the work of development is done; a remnant of them still lingers behind, and shows itself in the formation of cicatrices, though it is incapable of such grand demonstrations as the growth of a limb, or the reproduction of an entire being from a fragmental nucleus.

That the reparative is but a relic—a renewal, in short, of the developmental processes, is probable in these higher, no less than in the lower animals. It seems that in the growth of cicatrix, the formation of fibres, vessels, and nerves that compose it, takes place very nearly according to the same plan as that by which those tissues are developed in the embryo; and the comparison of the process of ossification in foetal bones with the successive stages which lead to the formation of callus uniting a broken bone, is no less striking. Above all, the remarkable similarity between the ill-formed portion of skin surmounting a harelip, and cicatrix, that is, between a tissue whose development has been imperfect, and one which is the product of reparation, must not be lost sight of, for it goes a long way to prove, if proof be required, that reparation is, after all, but a lame attempt at development.

Of course all the conditions necessary for nutrition, such as a due supply of nutritive fluid, proper assimilative energy, &c., are essential to reparation; and something more, for reparation requires an unusual effort of the nutritive powers, and may fail to take place under circumstances which do not arrest nutrition. Thus in old people wounds often do not heal, giving rise to ulcers, or even to gangrene. One of the causes of failure of the operation for extraction of cataract in elderly persons, consists in the want of healing of the wound, owing to a deficiency of nutritive energy. Mr. Travers mentions the case of a man paralyzed in his lower extremities from injury of the lumbar vertebrae; he fractured at the same time the humerus and the tibia; the former united; the latter failed to do so. As a general rule, wounds heal less readily, and leave a more decided scar in the lower extremities than in the upper, and in the latter than in the trunk and face. In very early infancy, when the textures are of exceeding delicacy and tenderness, I do not think wounds heal readily, the uniting medium is soft, and easily gives way, and inflammation with ulceration is very quickly excited in the surrounding parts. For this reason it is usually wise to postpone the operation for harelip till the child is a year old.

Let us consider the more ordinary modes in which the healing of wounds takes place. In the case of a simple incised wound, where the soft parts are merely divided by some sharp instrument without any further injury, if the divided surfaces be maintained in close and tolerably accurate apposition, they will often adhere together, being united by the thin layer of blood effused between them, which seems to become organized, and to form the narrow line of

cicatrix observable for a certain time afterwards. This union by first intention as it is called, is a very simple process, scarcely amounting to more than a mere sticking together of the divided structures; the blood finds its way from vessel to vessel across the chink, and the current of nervous influence is re-established, as if nothing had happened. There is no unusual activity of the circulation or nutrition, and the reparative forces are scarcely called into play at all.

Commonly, however, owing to the more extensive division of parts, or their less accurate coaptation, this adhesion does not so immediately occur, or it takes place only in certain parts, and the remaining intervals require to be filled up by some new formation. These intervals are at first occupied by blood, poured into them from the divided extremities of the vessels; and, provided the blood do not exist in too large a mass, it coagulates, the red colouring matter disappears, and the fibrin may remain, and form part of the uniting medium. At the same time an increased amount of activity is manifested in the adjacent small vessels, which become loaded with an unusual quantity of white corpuscles, and are, in short, in that condition which I described as belonging to the first stage of inflammation. Lymph, by which I mean the fibrin of the blood altered by this inflammatory process, is quickly effused in greater or less quantities into the wound; and this lymph, mixing, it may be, with the previously effused fibrin, or supplanting it, forms what has been called the lymph-bed of organization, in other words, forms the medium from which the new tissues of the cicatrix are to be evolved.

The subsequent stages of the process consist in the gradual conversion of the lymph into a structure capable of firmly uniting the divided tissues, and bearing a more or less close resemblance to them. In virtue of its own inherent properties it becomes organized and forms a tissue, and the qualities of that tissue are modified by the assimilative influence of the structure near which it lies. This takes place in the same manner as in ordinary nutrition, though the process is now less perfectly completed in consequence of the disadvantageous circumstances under which the assimilative influences are exerted. Integument thus reproduced has a fibrous structure, and is furnished with cuticle, so far resembling the natural skin, but the want of complete subordination of the fibrin to the regulating forces of nutrition is shown by the harshness of the cicatrix, its contractility, and the absence of that softness, suppleness, and elasticity, which give so great advantages to the true skin. It is also without glands and hair. Vessels are formed in the lymph apparently in the same manner as they are produced in embryonic structures, first presenting themselves in arborescent streaks which coalesce into a vascular network and anastomose with the surrounding capillaries by the same property which enables them to communicate with one another. The formation of nervous tissue between the divided ends of nerve must be referred also to the assimilative influences which are operating upon the nascent cicatrix; but, although microscopical observation and experiment sufficiently prove the reunion of nerves, the extent to which it actually occurs is not

quite certain; for instance, in the reunion of a compound nerve are the individual fibres respectively joined together according to their particular properties? or are they first blended together in one cicatrix which after a time becomes traversed by fibres passing in an irregular and accidental manner between the divided ends of the nerve, so that sensitive and motor filaments become linked together in a confused manner, and the powers of sensation and motion are incompletely restored?

It is a much disputed question whether the reparative process which I have been just describing to you, is of inflammatory nature, and whether the medium of union constituting the cicatrix, is to be regarded as an inflammatory product. This must of course be decided by the latitude of meaning which you allow to the term inflammation. I have already told you that this process, though widely separated in its results, differs only in degree from that to which the name inflammation is admitted by general consent. It is no easy matter to draw the line between inflammation, reparative, and inflammation destructive, and I think it is better to indicate this close relation by including both under the same name, distinguishing them as I have done, by the expletive, which rather denotes a difference in the results or in the degree, than in the nature of the phenomena. The reparative inflammation consists of that stage of the process which is characterized by an unusual activity of the circulatory and nutritive forces; the blood-vessels are enlarged, the rapidity of the current through them is increased, the fibrin is elaborated in greater abundance, and is endowed with greater energy, so as to meet the extraordinary demand occasioned by the unusual effort of nutrition attendant upon the healing of a wound. Even this same degree of inflammation ceases to be reparative and becomes destructive, leading to various effusions and alterations of structure when it takes place without a necessity for its operation; and one of our great objects in the treatment of wounds is to prevent the inflammation exceeding the bounds of reparation and running on to the destruction of the parts involved, whereby it occasions suppuration and ulceration, instead of cicatrization.

It would seem that one of the great ends answered by that degree of inflammation, which we call reparative, is the effusion into the wound of fibrin possessing a greater force of organization than usually pertains to that component of the blood. This peculiarly gifted fibrin, or lymph as it is called, displays its energy by transforming itself into tissue under circumstances where ordinary fibrin would probably fail of so doing. It is partly in consequence of its greater inherent energy that the fibrin so effused is less amenable than usual to the surrounding assimilative forces, which, besides, operate upon it at greater disadvantage than usual, in consequence of the particular circumstances under which it is effused. No wonder, therefore, that it retains some of its own peculiar properties in spite of them, and that the new tissue presents a sort of intermediate structure between lymph and the tissue it replaces. I have pointed out to you one of the remarkable instances of this half and half formation, viz., the cutaneous cicatrix and its likeness to lymph on the

one side, and to skin on the other, of which either resemblance preponderates according to circumstances. I may remark that the lymph effused in the process of reparation, seems to present little or no difference from that which results from inflammation occurring under other circumstances.

When the divided surfaces of a recently-incised wound are brought into contact, however accurate the apposition may be, there necessarily remains a thin layer of blood between them; and I have said that in some instances, the immediate agglutination of the divided parts seems to be effected by means of the fibrin of this blood, which becomes organized and forms a narrow line of cicatrix. In other cases this fibrin appears to become intermixed with the coagulable lymph subsequently effused into the wound, and uniting with it, forms the so-called lymph-bed of organization, from which the uniting medium, the cicatrix, vessels, nerves, &c., are developed. But I should tell you that the part taken by the fibrin of the blood in the actual process of reparation has not been clearly ascertained. Some persons, indeed, doubt the capacity of fibrin for organization under such circumstances; unless it has previously undergone that peculiar change in the blood-vessels, which gives to it the properties described to belong to coagulable lymph. This is, I think, assuming rather too much, for although we may readily admit that coagulable lymph has much greater capacity for organization than the ordinary fibrin of the blood, there is sufficient evidence that fibrin does also sometimes become organized. A rude attempt at the formation of structure is observable in blood which has coagulated after its removal from the body and in the coagula found in the heart and great vessels after death, also in the laminated coagula contained in an aneurismal sac; and a slight degree of organization takes place when fibrin concretes upon some rough point to which it may be accidentally exposed in its circulation through the blood-vessels. The warty formations so often formed upon the valves of the heart, appear to originate in this way, being dependent on a slight ulcer or abrasion of epithelium occasioned by inflammation, in consequence of which a rough surface is presented, upon which some of the fibrin of the circulating blood coagulates and becomes organized. I grant that this organization of effused fibrin takes place very unwillingly and very scantily. I have often been surprised to find in how slight a degree it had occurred in the coagula formed in vessels which had been tied for weeks and months before death, and it is not certain that it ever actually takes place in the blood effused among the tissues in ecchymosis. In by far the greater number of instances effused blood becomes absorbed rather than organized. You will understand, therefore, that the share which the blood takes in the reunion of divided parts is a debatable question, and in expressing the belief that it may, under some circumstances, become the uniting medium, I by no means am disposed to acquiesce in the favourite theory of Hunter, that "blood extravasated from ruptured vessels is efficacious in becoming a living solid equally with coagulable lymph."

You must also bear in mind that the blood is likely

to take part in forming the bond of union only when it is effused into the wound in very small quantities. For if a large mass of it be present, it not only interferes with the coaptation of the divided surfaces, but it loses its own vitality and becomes the source of considerable irritation, till it has been discharged, so that before closing a wound it is always expedient to remove any coagula that may happen to have formed in it, and to take measures for preventing any subsequent effusion of blood by securing the bleeding vessels, applying pressure, and so forth.

The union of a wound in either of the ways I have mentioned, is said to take place by adhesion, and it is soon accomplished, a few hours sufficing for the effusion of coagulable lymph, and a few days for its conversion into cicatrix. Parts sometimes admit of being thus reunited when they have been nearly or even completely detached from the body for a short time; thus, flaps of skin hanging by a narrow pedicle, will often adhere again if they be replaced with care, and they will not only adhere to the part from which they have been taken, but to any other recent wound. The taliacotian operations for the formation of new noses and the restoration of lost parts, owe their success to this property. You will read in the works of Mr. Hunter, some interesting experiments with reference to the vitality and capacity for union of parts which had been entirely separated from their natural connections and transplanted to some new locality. He detached the spur from the heel of a cock, and inserted it into the comb where it adhered and grew well, flourishing the more vigorously in consequence of the greater richness of the soil. He also cut out the testicle of a cock and placed it quickly in the abdomen of a hen which he had laid open for the purpose, where it lived and contracted adhesions. It is a well-known fact that teeth may be transplanted in the same manner.

When the union by adhesion fails, either in consequence of the extent of the wound, and the want of coaptation of the divided surfaces, the presence of coagula, or the severity of the injury causing too great an amount of inflammation, the wound is reduced to the condition of an ulcer, and must be healed by granulation and cicatrization in the same manner.

This third mode of healing differs from either of the preceding, in being a much more elaborate process; it involves an intermediate stage between the formation of the uniting medium and its conversion into cicatrix, during which it is developed into a temporary structure, endowed with vessels and nerves, and called granulation. By the subsequent modification or assimilation of this intermediate structure, the cicatrix is slowly formed, in the manner I described to you when speaking of the healing of ulcers.

There appear, therefore, to be three chief processes by which the reunion of divided parts is effected. First, the thin layer of blood effused into the wound coagulating and agglutinating the parts suffices in some cases of slight injury to form the bond of union. Secondly, and more commonly coagulable lymph is poured into the wound from the surrounding vessels displacing the blood, or perhaps intermixing with its fibrin; and this lymph becomes converted into cicatrix.

Thirdly, the blood and lymph first effused do not, either of them, become organized, but pass away in the form of discharge, a process like that of ulceration is established, whereby rough fragments are removed, and a plain surface established. Coagulable lymph exuding upon this surface becomes developed into granulation, and in process of time the granulation is transformed into cicatrix.

In the treatment of simple incised wounds our attention is directed to two chief points, viz., the effecting and maintaining the coaptation of the divided surfaces as accurately as possible, and the prevention of destructive inflammation.

A variety of means are employed to accomplish the first of these objects, and the difficulty of selecting those which are most appropriate in each instance is not great. When the wound is not severe, and the surfaces fall into contact without much trouble, no treatment is superior to that suggested by the instincts of nature, viz., the immediate binding up of the wound by a handkerchief, lint, or other substance. The coagulating blood forms a very effectual and unirritating plaster, the pressure of the bandage serves the double purpose of securing the adaptation of the surfaces and of preventing inflammation, and it may be allowed to remain on for some days, when it will come off easily, and the wound will very probably be found to be healed. If the part becomes painful and swollen, the bandage should, of course, be removed; a little suppuration will then generally be found to have taken place, and a poultice or water-dressing will give relief.

It very often happens, however, that so simple a measure will not suffice to close the wound, and maintain the apposition of the divided parts. I cannot describe to you the plan of treatment I would advise to be adopted in such cases in a better manner than by reminding you of the mode in which you have seen the dressing of wounds caused by amputation conducted in the hospital. In the first place we are very careful to secure the bleeding vessels, for the sake of avoiding the risk of effusion of blood into the stump after it is done up; and I would especially recommend you not to hurry over this stage of the proceeding. Any coagula which may form in the stump being then removed, the apposition of the integuments is secured by interrupted sutures, placed at intervals of rather more than an inch. Between the sutures narrow strips of adhesive plaster are applied, a circular bandage is wound round the stump, and the coaptation of the parts at the bottom of the wound is secured by pads, made of cotton-wool, or other soft material, placed one above and one below. These pads do not meet on the face of the stump, and they are secured in their position by strips of plaster and turns of the bandage. I regard these pads as a great security against secondary as well as immediate hæmorrhage. They facilitate the union of the deep parts of the wound, and, as instruments of pressure, when well applied, they assist in preventing the occurrence of destructive inflammation. By this plan of dressing the deep parts as well as the edges of the wound are kept in close contact, although the whole line of incision, except at the points where

it is crossed by the narrow strips of plaster, is exposed to the air, and you can watch the condition of the wound, and remove the sutures, if necessary, without disturbing the other dressings in the slightest manner. The patient, of course, is kept in bed, and the stump rested on a pillow, to which it is lightly secured by a bandage.

Supposing all things to go on well, in the course of a few days, (four, five, or six, as the case may be,) the dressings having been well soaked with warm water, or by the application of a poultice the night before, they may be all removed carefully, so as to give the patient little or no pain; and some or all of them may be reapplied, according to circumstances. I am never in any hurry to remove the sutures, for I do not find that their continued pressure during many days does any harm, and the soft bond of union sometimes gives way if the support afforded by them is withdrawn too early; and if they be allowed to cut their way out, no evil follows. It is often advisable, however, to remove some of them on the first dressing, in order that a free vent may be given to any accumulation of matter that may have taken place in the interior of the stump. You will generally find that union of the integuments at the suture points has occurred in several places, and I regard this to be one of the great advantages of sutures, for you can scarcely overestimate the importance of early union at any part of so great a wound, especially when the patient is in a reduced state of health, and has barely force enough to carry on the work of reparation. I believe the simple circumstance of the early union of the integuments at some points, which is best effected by sutures, not unfrequently saves the life of the patient. After this period the dressings should be repeated more frequently, perhaps every day, because there is generally some discharge; and cleanliness is, in the treatment of wounds, of the utmost importance. When you shall have witnessed the practice in other hospitals, I am bold enough to think you will admit that the great attention which you here see bestowed upon the dressing and general treatment of stumps and other wounds, is not altogether in vain. I must leave it to your judgment and experience, to suggest the treatment required by particular circumstances as they arise, and will merely add the hint, that it is not desirable to adhere to the starving regimen after severe wounds and operations, so very closely as some surgeons think necessary.

At one time, I followed the plan adopted by the Edinburgh surgeons, of leaving stumps and other large wounds open for a few hours before bringing the surfaces into apposition, but I did not find that it was attended with any decided advantage as regarded the healing of the wound; bleeding from the stump, which a little pressure would have prevented, used frequently to occur when the patient was placed in bed; and the pain and annoyance of the dressing to a patient just beginning to repose after the shock of an amputation, is worse than a second operation. I have, therefore, discontinued this practice for some time.

Sutures may be applied in the scalp or any part of the body, but the benefit of them is most perceived in wounds of the face, where the muscles are attached

to the skin, and are continually acting so as to drag asunder the edges of the wound. The thread should be thick or double, and it should not be tied too tightly, otherwise the portion of integument included in the knot perishes, the thread soon cuts its way out, and the scar is increased. As a general rule, the needle should be passed through the skin only, for if it be thrust deeper it often fails to bring the edges of the skin in contact, and immediate union does not take place.

The general plan of treatment, which we employ after amputation may be adopted, with slight modifications, in the management of other severe wounds. I do not advise you to apply moisture in the form of water dressing or poultice in the first instance to a simple incised wound, because I think that by such treatment you run some risk of losing the chance of union by first intention; the uniting medium, whether it be blood or lymph, being by such means kept in a dissolved state, and not permitted to coagulate readily, and agglutinate the divided surfaces.

When, however, from the severity of the injury, and the torn, contused, or mangled condition of the wound it is obvious that union by adhesion will not take place, I believe it the best plan not to attempt the closure of the wound, but at once to begin the treatment with moist soothing applications, whereby the discharges are facilitated, and the ensuing inflammation modified. The same observation applies to the treatment of gunshot wounds; and the propriety of leaving such wounds open, and covering them only with poultice or water dressing, is confirmed by the fact that all such cases do well in proportion to the size which the external orifice bears to the depth of the wound. Where that orifice is small, as in the case of punctured wounds, the effects of inflammation occurring at the bottom of the wound, and spreading to the deep parts of the limb, are much to be dreaded; and this is especially the case when any tough structure, such as a fascia, has been penetrated, because it prevents the escape of the secretion formed beneath it. I have known the most severe, and occasionally even fatal, inflammation, with interstitial suppuration, excited among the muscles of the thigh, by a simple and apparently slight puncture through the fascia lata. In a case of punctured wound through the fascia lata, a little above the outside of the knee-joint, which was in the hospital not long ago, this kind of inflammation had commenced, and would probably have done much mischief, had it not been arrested by a free incision through the fascia.

The cicatrices and the parts about the cicatrices of wounds which have been occasioned by the bite of an animal, or any poisoned instrument, often remain indurated and swollen for a considerable length of time, presenting a very unsightly appearance. Rat bites are especially troublesome in this way, and the same thing now and then occurs when the wound has been caused by a blow or a blunt instrument. In course of time this induration generally subsides, and the scar assumes the ordinary, soft, supple, healthy condition. Occasionally these lumpy cicatrices increase in size, become warty, and present other alterations of structure, and may even require to be extirpated with the knife.

I have said that one of the objects we keep in view in the treatment of wounds, is the prevention of destructive inflammation, which we endeavour to effect by keeping the part at rest, by soothing applications, &c. When such inflammation does set in, we use the antiphlogistic treatment, as in other cases. Leeches are often highly serviceable in reducing the inflammation attendant on a wound; even general depletion may be needed.

Often as our efforts are required to combat the excess of destructive inflammation, we seldom have grounds for apprehension respecting a deficiency of the reparative stage of that process, provided the general health of the patient be tolerably good. In old people, however, and in persons whose nutritive powers are naturally very feeble, the reparative forces not uncommonly fail to restore the fabric when it has been injured even in a slight manner. Inflammation takes place, but it runs on to ulceration instead of healing the wound, for it seems to require some energy of nutrition to restrain it within the bounds of reparation, and to prevent its advancing to injurious results. You will find a marked difference in this respect between patients whose nutritive powers are naturally feeble, and those whose energies have been prostrated by some severe sudden attack. This difference is well illustrated by two lads now in the hospital, one of whom, (an exceedingly delicate boy) underwent amputation of the knee some months ago, in consequence of strumous disease of the joint, the stump has not nearly healed, a large pale ulcer remaining, with scarce any effort being made to close it up. In the other lad, who possesses greater natural powers, but was so much reduced by sudden and severe disease of the lower end of the thigh bone and the knee, that it was doubtful whether he would bear the shock of the amputation, the stump has almost healed within three weeks after the operation.

CASE OF

ABSCESS IN THE SPLEEN,

OPENING THROUGH THE LEFT LUNG ABOVE THE CLAVICLE;

By W. NEWNHAM, Esq., Farnham.

John Spreadborough, aged 48, became my patient at the beginning of February 1815; he had been ill for a month, and had been attended by one who has long since passed to his final audit, and of whom *de mortuis nil nisi bonum*. Spreadborough was a pauper, and sent to me earnestly entreating that I would attend him, and I continued to do so gratuitously till his death. Under the circumstances I was unable to procure any history of the case except from the patient himself, who told me that he had caught cold about a month before, and that, although he was better, yet he did not get well. From the general type of disease in the preceding January, and from his own details, corroborated by the reduced condition in which I found him, I conjectured that he had been the subject of inflammatory fever, from the

disturbance of some internal viscus. He complained principally of pain in his back and hip, both of the left side. His bowels were constipated, and he had abscess forming under the fascia of the right arm; this was immediately opened, and healed kindly though slowly. His general health seemed to improve for a time under the treatment pursued, but the amendment was of short duration, for presently his tongue became loaded, his pulse quick and wiry, with irregular rigors, constant evening accession of fever, and morning perspirations. These symptoms were accompanied by oedema and loss of voluntary motion in the left arm, becoming daily more and more aggravated. At this time a small tumour appeared just above the clavicle, which he spoke of as painful, the pain extending down the oedematous arm. There was an obscure fluctuation but it was very indistinct, in consequence of being hidden behind the clavicle. He now complained of cough and dyspnoea; his hectic symptoms went on augmenting, while his strength declined daily.

On the morning of the 8th of March he had passed a restless night from cough and extreme difficulty of breathing, and so urgent was the latter symptom as to threaten suffocation. Believing these symptoms to arise from the presence of extraneous matters within the cavity of the chest, and being confirmed in my previous idea that the little tumour above the clavicle contained matter, which I had reason to believe communicated with the chest, I cautiously inserted a lance, and there was discharged more than a pint of very fetid pus. This gave the patient some relief. For a few days his symptoms were mitigated, the discharge continued very great, the oedema gradually subsided, the cough and expectoration diminished, hectic symptoms declined, and his pulse came down to under 100, while his appetite daily improved a little.

At this time, however, he became the subject of slight diarrhoea, and the sedes, though mixed with feculent matter, consisted principally of a dirty black liquid resembling coffee grounds; and this went on increasing, till on the 17th of March he again experienced difficulty of breathing, which symptom gradually augmented, his strength failed, his pulse rose to 160, and on the morning of the 20th he expired.

The *post-mortem* examination took place on the 21st, twenty-four hours after death; and I find the following appearances chronicled in my note-book:—

1. The intestines were much inflated with air, but presented no other morbid appearance.

2. The liver was much enlarged, and on cutting into its substance presented a granulated appearance. Disease was not far advanced, and was probably only a consequence of other more important derangements.

3. The stomach was much distended, and adhered to the left lobe of the liver by a portion of its surface, exceeding the size of a shilling. These adhesions were feeble and easily torn up, bringing to view a considerable ulcer of the stomach, which had destroyed even its peritoneal coat, and excavated the corresponding surface of the liver to a considerable depth. On the internal coat of the stomach this ulceration had proceeded much further; the stomach was itself filled

by a large quantity of a liquid, resembling diluted coffee grounds, and was evidently the source of the morbid excretions above particularized.

4. The spleen was exceedingly soft in its texture, contained a considerable quantity of purulent matter, was adherent to the diaphragm over a considerable space, and presented to it an ulcerated surface of more than three inches in extent, covered with dark-coloured pus, as if mixed with the broken down red particles of the blood.

5. The diaphragm presented a corresponding lesion; and through it, a communication had been formed by the ulcerative process between the spleen and the left lobe of the lungs.

6. The lungs were healthy in their external characters, save at the ulcerated communication with the diaphragm, around which were newly-formed adhesions of the pleura. There was also, generally, considerable adhesion of the costal to the pulmonary plume. The substance of the lungs was healthy and natural, except in the immediate route of a channel for the discharge of pus, which had been formed through the substance of the left lung, from the adhesion to the diaphragm to its superior surface. This channel opened about an inch and a half below the superior extremity of the sternum, and then burrowing through the cellular substance of its posterior surface, it communicated with the external aperture above the clavicle. Where the pus made its appearance on the superior surface of the left lung, adhesions had been so formed in the neighbourhood, as to leave but a very small surface comparatively for it to lodge in, and no way of escape but through the external aperture already mentioned.

7. The heart and appendages were quite healthy. It is worthy of remark, that in the progress of this disease there was no sickness, at any time, nor the smallest headache.

REMOVAL BY LIGATURE, OF A SAC CONNECTED WITH THE MEDULLA OBLONGATA, FOLLOWED BY DEATH.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND
SURGICAL JOURNAL.

Sir,
I send you the enclosed account of a somewhat singular case which occurred lately in the Taunton and Somerset Hospital, and of which a portion of the brain which had been preserved was exhibited at the recent meeting of the Taunton Branch of the Association.

I am, Sir, your obedient servant,
HENRY ALFORD.
Taunton, June 16, 1849.

Louisa Hammet, aged three months, daughter of a labourer, was born with an erectile tumour at the upper part of the nape of the neck, of the size of a walnut. Child perfect and healthy in every other respect. The tumour was of a rounded, somewhat oval form, with a neck rather less in diameter than the body of the

tumour, the healthy skin running into the injected and varicose integument beyond the neck on the side of the disease, so that the neck itself presented a healthy and sound skin. It increased rapidly in size. At two months old it was as large as a hen's egg, being sometimes more injected and tense than at others, and admitting of being partially emptied by pressure. The child continued healthy, sucked heartily, and grew.

May 22nd. When about ten weeks old she was admitted with her mother into the hospital, and on the 24th of May, after a consultation on the case, two double ligatures were passed through the base of the tumour, tightened and tied, so as to strangle it. On passing the needle the first time, a slight gush of blood escaped, and on transfixing it the second time, a considerable quantity of serum was discharged, and continued to drain out for some time. On the following day the tumour had become black, and had evidently lost vitality. The child was restless, but had no bad symptoms. By the 31st it had all separated, except a small portion of the size of a filbert. On June 2nd a ligature was applied round the base of this remaining portion, and on the following day it all separated.

June 4th. The wound was clean and healthy, about the size of a penny piece, but discharging serum frequently from some part of its surface.

5th. The edges of the wound were drawn nearer each other with isinglass plaster.

The child had gone on well after the two or three first days, until June 2nd, when it appeared very weak, and showed symptoms of sinking; it carried the head very much back, resting the occiput almost between the shoulders. It rallied a little on the 4th and 5th of June, but sunk again, and died on the 7th, at 7 a.m., having been convulsed some hours before its death.

Examination of head and cervical region five hours after death.—The surface of the wound looked healthy, the edges cicatrizing, and about the size of half-a-crown; on passing a probe over the surface, the point passed into a small opening, leading to a sac which communicated with the spinal cord. On examining the cervical vertebrae they were found all entire, except the atlas, the posterior part of the ring of which was wanting, and the foramen magnum was enlarged by a deficiency in the occipital bone posteriorly, and rather to the right side, forming an abnormal opening, of more than half an inch in diameter; through this opening the sac behind the tumour extended into the substance of the medulla oblongata, and was continuous with the fourth ventricle above and below, with an opening or foramen in the centre of the spinal cord, which extended downwards four inches at least below the cervical portion. On examining the brain the cerebrum was found perfect and healthy, except a congested state of the veins of the pia mater; and the lateral ventricles were dilated, containing a considerable quantity of purulent serum; the cerebellum was entirely wanting, the crura cerebelli terminating in a truncated form; the fourth ventricle open, and continuous with the above-mentioned sac; the pons varolii small, hard, and irregular in shape, and having on its surface a number of white, semi-transparent, flattened, hard substances,

of the size of split peas, and smaller; the cavity of the fourth ventricle had also several roundish and oblong hard substances, attached by pedicles to its walls, something like the *carneæ columnæ* and chordæ tendinæ in the cavities of the heart; the sac was quite at the base of the erectile tumour, and was only punctured at its apex on the passage of the second needle.

There was nothing in the appearance or form of the tumour, or in the appearance or symptoms of the child, to indicate the existence of spina bifida or cerebral malformation. The child never showed any signs of paralysis or cerebral symptoms of any kind until the convulsions immediately preceding her death.

SUCCESSFUL CASE OF LITHOTRITY.

By WM. JEAFFRESON, Esq., F.R.C.S., Framlingham, Suffolk.

(Read at the Suffolk Branch Meeting of the Provincial Medical and Surgical Association, held at Brighton, July 15th, 1849.)

Joha Lee, aged 75 years, after suffering severe symptoms of calculus vesicæ for several months, submitted to lithotripsy on the 15th of November, 1848.

In the presence of my friend, Mr. Evans, and my son, I introduced Costello's hollow silver sound, with more than usual difficulty, apparently from thickening or contraction in that part of the urethra immediately anterior to the prostate gland; but after injecting the bladder, I had, on introducing my smaller percussor, no difficulty in seizing a calculus, measuring about seven lines in diameter, which was crushed through its entire substance, as evidenced by the necessity for repeated application of the hammer. One of its larger fragments was also seized and crushed.

On my visit on the 18th, with Mr. Evans, I was disappointed; no detritus had passed, probably from the thickened state of the urethra, which induced the observation from my friend,—"Well, if you succeed in this case, I shall give lithotripsy credit."

As neither the appearance of the urine, nor the presence of excitement forbid, I seized and crushed four fragments, bringing away the hollow of the female blade completely filled with detritus.

On the 21st I visited him with my neighbour, Mr. Wilson, and was gratified at receiving a few fragments, the produce of the last operation. These were the first which had passed during the intervals.

25th. Three fragments were crushed at this sitting; 29th, four; December 4th, three; 8th, four; 11th, three; 15th, three; 19th, three; 23rd, three; 28th, three; having in the interval had some severe catarrh.

On the 30th two more.

January 2nd, 1849. In the absence of my son, three fragments were removed; 6th, three ditto; 9th, three ditto; 13th, three ditto; 16th, three ditto; 20th, two ditto; 22nd, two ditto; small; 25th, one ditto, small.

27th. Could detect none, and all symptoms removed.

30th. The same.

June 4th. John Lee presented himself at my request, and expressed himself quite well.

ACCIDENTAL INTRODUCTION OF A "PUFF-DART" INTO THE LEFT BRONCHUS, FOLLOWED BY ABSCESS.

AND ITS EXPULSION DURING A FIT OF COUGHING, ENVELOPED IN PUS: COMPLETE RECOVERY.

By R. S. NUNN, M.R.C.S., Surgeon to the Essex and Colchester Hospital.

(Read at the Suffolk Branch Meeting of the Provincial Medical and Surgical Association, held at Brighton, June 15th, 1849.)

Henry Taylor, a stout florid young man, groom to the Rev. Mr. Herring, of Fordham, was admitted into the Essex and Colchester Hospital at half-past five in the afternoon of the 1st of March, 1845. His appearance indicated considerable constitutional disturbance, his countenance being anxious and suffused. He was suffering from great dyspnoea, and frequent short cough, which produced pain about the upper part of the sternum. His breathing was hurried and difficult, but his pulse not very excited, being only 84 per minute.

He states that whilst playing at a game called "puff-dart," one hour previously, in making a deep inspiration preparatory to blowing the dart through the usual tube, he inspired the projectile, which was formed of a nail, wrapped round at one end with worsted, and of which the accompanying cut is an accurate representation.



On examination by the stethoscope, the only specific sign distinguished was a loss of the respiratory murmur on the left side. He was ordered Hydrarg. Chlor., gr. v.; Pulv. Jalapæ, gr. x. Fiat Pulv. hæc nocte sumend.; Haust Sennæ cras mane. Low diet.

2nd. He passed but an indifferent night, sleeping soundly, however, at intervals. There was but little alteration in his breathing; his pulse was rising, and his tongue coated; the bowels had been freely opened. On percussing the chest, it was found that the right side was resonant, and as it should be, whilst there was very decided dullness in the upper part of the left side, more particularly in front, and no respiratory murmur was to be heard in any part of this side of the chest. R. Liq. Ant. Pot. Tart., m. xx.; Mist. Saline, oz. j. M. fiat haust tertia quaque hora rep.

3rd. Slept but little during the night, and the expression of his countenance still anxious; his skin hot, harsh, and dry; pulse 112, and no improvement in the chest symptoms; His bowels had not been relieved, but the first dose of the antimony had produced vomiting, which relieved him for awhile. He had expectorated some glairy mucus, and slight

crepitation was heard at the inner part of the sub-clavicular region of the left side. Venesection ad oz. xij. Adde Liq. Ant. Tart., m. x., sing haust.

4th. Slept better; spoke of himself as being more comfortable, and the expression of his countenance was less anxious. His bowels were opened twice; pulse 112; had coughed up about an ounce of mucus. The dulness on percussion was more circumscribed, and the crepitation more distinct and general.

5th. Was much the same, but the expectorated mucus was frothy; countenance less indicative of suffering.

6th. His expectoration was slightly tinged with blood; he was restless, and his pulse 96. R. Tinct. Opii, dr. ss.; Haust Saline, oz. j. M. fiat haust hac nocte sumend.

7th. This morning he was altogether better, his pulse had dropped to 84, he had passed a good night, and his cough troubled him but little.

He gradually improved after this time, until the 17th of April, when he was made an out-patient.

I lost sight of him from this date, until the evening of May 2nd, when I was sent for by his friends in the greatest haste, the messenger expressing his belief that my patient would be dead, before I could reach Fordham. I found him in a state of extreme collapse, covered with a profuse and cold perspiration; his breathing was scarcely perceptible, and he was pulseless at the wrist. On enquiring into the cause of this state, I found that he had been suddenly seized with a violent fit of coughing, and had brought up a large quantity (nearly a quart) of pus, which had been thrown away on to a dunghheap. On search being made, however, the cause of all his trouble was found, covered with pus and extraneous matter. I have kept it to this day, and am happy in having an opportunity of showing it to you.

He rallied after a little time, stimuli having been given freely, and heat applied externally, when I was enabled to examine the state of his chest. I found puerile breathing on the right side, and pectoriloquy with gurgling over a considerable extent, midway between the clavicle and the nipple, on the left side; in fact every evidence of a large cavity, communicating with a bronchus, and containing more or less fluid. His pulse was at 140, and he shortly began to suffer from restlessness and cough.

I ordered him to be well watched, to be kept very quiet, to have nothing but warm milk to drink, and gave him an anodyne.

I visited him on the following day. He was still restless, but his state was slightly improved. Pulse 130. He had expectorated about a pint of matter between my visits. Continue same diet. R. Liq. Morph. Acet., m. iv.; Tinct. Hyoscy., m. xij.; Vin. Ipecac., m. vi.; Mist. Camph., oz. j. M. Fiat haust. sextis horis sumendus.

The next day I found him better. Pulse 114. He had not so much constitutional disturbance, and his cough was less frequent. He gradually improved. His restlessness and hectic left him after a while, his expectoration by degrees diminished in quantity, his pulse fell to 90, and after the exhibition of tonics and a

better diet, (which, through his good luck in having a liberal master, could be regulated according to circumstances,) he left his bed, and slowly and cautiously returned to his accustomed employment, suffering much, however, occasionally from shortness of breath, and pain in the left side of the chest; but these symptoms entirely disappeared after a time, and when I saw him, with my friend Dr. Duncan, we both agreed, after carefully examining him, that he was in robust health,—that his respirations were quiet, slow, and equal,—that his pulse was quiet and regular,—and that he had no cough; that, in one spot, midway between the left clavicle and nipple, and towards the sternum, there was more blowing breath-sound, and more vocal resonance than natural. There was no difference in the relative expansion of the sides of the chest, and the left side was neither contracted nor drawn in on respiration; in fact there was evidence of a small bronchial dilatation, but of no further abnormal condition, and he is now able to do the work of an able-bodied labourer.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, JULY 25, 1849.

The questions which have usually occupied the attention of those who take a prominent part in the proceedings at the Anniversary Meetings of the Provincial Medical and Surgical Association, viz., Medical Reform and Parochial Medical Relief, are so completely at a standstill, that there will most probably be scarcely any discussion on either of these subjects at the approaching meeting; but there is a point of the greatest importance, which concurrent circumstances combine to press upon our notice, as one which is more peculiarly adapted for the consideration of those about to assemble at Worcester, the birth-place of the Society; under the presidency, too, of its founder, and with the necessity which exists, for the selection of a new Secretary and Editor, upon the proper choice of which officers must in a great measure depend the future stability of the Association.

The subject to which we allude, is the careful examination of the internal machinery of the Society, with the view to repair—if repair be needed—the derangements which may have taken place in riding through the storms encountered during the seventeen years of its duration. This machinery consists of a President, Council, and Secretary, which is that usually adopted in societies of a similar description; the only peculiarities consisting in the large number of

Councillors, in their being scattered over a wide extent of country, and in the comparatively small number of the local Council by whom the affairs of the Society are conducted in the intervals of the Annual Meetings, and who are resident in Worcester, the centre of organization.

It has been suggested by some, who are unacquainted with the difficulties necessarily attendant on the management of so large an institution, that the general Council is more numerous than efficacious. But the reasons which have led to this increase in number from time to time, are so weighty, as to warrant us from past experience, in advocating the continuance of the system which has led to such happy results. Those who have had practical experience in the management of a large society are well aware, that without the closest attention to the financial department, however promising in other respects, its prospects may be, the apparent vigour of its growth will but hasten its premature decay, at the very period too, when its maturity seems established on a firm and lasting foundation. Where the income also is drawn from annual subscriptions, appropriate arrangements are required for their collection, and it has been found necessary to have one or more responsible persons in every locality of sufficient importance, through whom the Secretary may communicate with the members, and upon whom they may call for assistance, as well in this respect as in others connected with the general objects of the Association.

It has also been objected that the Worcester Council is too small to carry on the affairs of so numerous and important a body; and this at first sight appears a feasible objection. But those who are accustomed to the transaction of business, well know, that in order to carry it on to a prosperous termination, we are dependent, not on the quantity but the quality of those who are engaged; and while Worcester can claim the services of our founder as President of the Council, it will be entitled to demand some more weighty reason to be assigned before the members of this Association will be inclined to remove the head quarters to some more populous locality. But let the centre be where it may, it is obviously necessary that the officers of the Association should be assisted by a local Council in their own immediate neighbourhood, for the management of the ordinary business. It is also requisite that there should be other persons with whom they may communicate

on all extraordinary occasions,—such are the officers of the Branch Associations, where they have been established, and the members of Council simply, where no Branches are in existence. The mode of appointment of Councillors has also been made a bone of contention; some parties alleging that they should be annually elected by balloting papers or means of a similar tendency. This, however, would entail a considerable degree of expense upon the Association, and would lead to perpetual jealousies and agitation. It has been the practice hitherto to adopt the recommendation of the Branches, where such are established, and where this is not the case, to select one or more senior members at the annual meetings. The representative system is thus really followed in the constitution of the general Council, and though it is perhaps desirable that they should be empowered to add to, or diminish, their number, we believe that that power has been rarely exercised independently of the Branch meetings, and never without an absolute necessity for so doing.

Whenever a new Branch is formed it is obvious that the members of that Branch must be represented in the general Council, and the persons already selected by the Branch, have always been considered the most eligible for that purpose; accordingly, it has been the practice to add them to the general Council, the officers of the Association being thus enabled to maintain a close correspondence with them, through the local Secretary of that Branch.

To the advantages of the Branch Associations it is scarcely necessary to allude, the admirable reports of their meetings, published in this and the late numbers of the Journal will enable any person who may be doubtful on that point, to assure himself of their perfect adaptation to the purposes for which they were designed.

Such, then, is the machinery by which this important Association has been hitherto conducted. It may appear unnecessary to explain these circumstances to the members at large, as, generally speaking, they are well aware of the nature of the arrangements, and have experienced their advantages. As, however, a misconception is supposed to exist in the minds of some parties who are imperfectly acquainted with the working of the Association, we have thought it right to give the foregoing explanation. And while we would impress upon all the advantage of now making themselves familiar with the mode of

conducting the business of this Society, we would also advise a careful and temperate consideration of any means which may be proposed as a substitute for those already in operation.

It is indisputable that much has really been accomplished, not only in promoting friendly intercourse and harmony among the members of a liberal profession, but towards the advancement of general science. Still no one can be more sensible than ourselves, that *all* the purposes originally contemplated as the great objects of association have not yet been *fully* carried out; but it becomes a serious question, and one worthy of anxious and careful enquiry, whether the machinery itself is radically faulty, or whether rather, the defect may not in some measure depend upon those for whom that machinery was originally designed.

Proceedings of Societies.

YORKSHIRE BRANCH OF THE PROVINCIAL MEDICAL & SURGICAL ASSOCIATION.

ANNUAL MEETING.

The Annual Meeting of the above Branch was held at the Museum of the Yorkshire Philosophical Society, York, on Thursday, June 29th, and was attended by the following members and visitors:—Mr. J. Allen, Mr. E. Allen, Mr. Dodworth, York; Mr. Dixon, Elvington; Mr. Frankham, Dr. Goldie, Mr. R. Hey, York; Mr. S. Hey, Leeds; Mr. Husband, York; Mr. Hornby, Pocklington; Mr. H. Jackson, Mr. Hichings, Sheffield; Mr. Metcalf, York; Mr. Ness, Helmsley; Mr. Powell, Knaresborough; Mr. Reed, York; Dr. Ryatt, Thirsk; Dr. Sandwith, Beverley; Dr. Simpson, Dr. Thurnam, and Mr. Williams, York.

Mr. H. Jackson was, in the unavoidable absence of Mr. Hey, the President, called to the chair, and introduced to the meeting Mr. Williams, who entered on the duties of his office as President of the branch for the ensuing year, and proceeded to address the meeting as follows:

Gentlemen,—I have pleasure in again meeting the members of the Yorkshire Branch of the Provincial Medical and Surgical Association, and I esteem it no less a privilege than an honour to preside on the present occasion. It is now seventeen years since the Provincial Association was formed, and ample opportunity has therefore been afforded of testing the soundness of the principles, and the correctness of the views on which it was founded; and in order to render the benefits resulting from it permanent and increasing, we have only to persevere in the path which has been so widely opened before us. Perhaps I may be allowed for a moment to glance at the present condition of medicine (using the word in its largest acceptation) in this country, and I feel assured we shall discover abundant cause for congratulation and for encouragement.

Whether we look at its civil or political standing, its literary and scientific position, or its social relations, I think you will admit there is much we have reason to prize, and much that calls for gratitude.

The civil or political *status* of members of the medical profession in this country has, for a very long period, been higher than that of surrounding nations, perhaps it might be said beyond that of any nation in the world. I will not at present enter into the consideration of the causes which have led to this elevated position in society, as it would be out of place on the present occasion. In proof of the position, I need not remind you that we have amongst us Councillors, Aldermen, Mayors, and even M.P.'s, besides the titles and honours conferred by the Crown on eminent individuals. The amount of literary attainment and scientific knowledge in the profession at the present time, far surpasses that of any former period, and it holds a just relation to the advances which have been made in every department of human knowledge during the present century. If the engineer and the electro-magnetist can boast of their locomotives and their railways, the rapid conveyance of our persons, and the still more rapid transit of our ideas; and if the chemist presents his long list of discoveries, beginning with the safety lamp, and ending with the electric light, we, too, can point to the stethoscope, the pleximeter, and the microscope. These have supplied us with the means of discriminating many important diseases, and have given a precision to our knowledge of the actual state of disease in certain parts, and also of the nature of morbid products, which has brought the study of medicine into somewhat closer affinity with the exact sciences. The present age may therefore be considered as forming an epoch in the history of our art, which does not yield in importance to that which introduced the doctrines of Stahl and of Hoffman, and which may fitly be mentioned with the discovery of Harvey. With a more accurate diagnosis, we have arrived at much greater certainty in the science of prognostics—that which the great father of medicine so zealously cultivated, and which always characterizes the enlightened and experienced practitioner. The chemist has lent his aid to our therapeutics; and his labours have resulted in numerous additions to our materia medica. But our remedial agents have also been largely increased by various appliances, which have not originated with members of the medical profession, and many amongst us have, notwithstanding, had the courage to employ them, and have thus shown their wisdom in condescending to derive hints from the various popular modes of treating disease, which have of late years been introduced; and unwilling as many have been to entertain the idea, we have been compelled to admit the existence of a power, which one individual is capable of exerting, (under certain circumstances,) over the nervous system of another; and several have had numerous opportunities of witnessing the beneficial influence of mesmerism in relieving and in curing various morbid conditions. It is not my intention to occupy your time by reading a retrospective address, but only to point out very briefly the leading facts connected with the present state of the healing art.

In looking at the literary and scientific standing of the profession at the present day, there is another

circumstance which I cannot forbear to notice, and which is particularly interesting to those who reside in the provinces. In by-gone days our great men were only to be found in the seats of learning and in the metropolis, reposing in the shade of academic bowers, or flourishing under the patronage of kings. But now there is a vast change in this respect. There is a general diffusion of intelligence and scientific knowledge through the length and breadth of the land. We have in our provincial towns men who are ornaments to their profession, who take rank with the first, and who contribute in large measure to the progress and improvements of the present day. Witness the contributions to our Journal, and to other periodicals—the existence of provincial schools, provincial societies, and provincial associations. As an indication of this diffusion of scientific attainment throughout the provinces, you will see, that of sixty-four contributors to the “Cyclopædia of Practical Medicine,” twenty-five were practising in the provincial towns of England, the remainder were from London, Edinburgh, Glasgow, and Dublin.

I am ready to admit that authorship is not an infallible criterion of wisdom and great talents; for whilst many of the first men in the profession give the world the benefit of their experience and judgment, it would not be difficult to show that all which is written is not wise; and on the other hand, it would be very easy to point out men who have deservedly taken the first place in the district in which they resided,—men who are thoroughly versed in the literature and science of medicine,—men whose opinion at the bedside uniformly commanded respect, who rarely, if ever, wrote an essay, or published a single case of disease. Such a man was the late Dr. Holme, of Manchester (though I do not bring him forward as worthy of our imitation in this particular,) and most of you, no doubt, could find such an individual within your own circle.

If the standard of literature and science has of late been raised amongst us, I am sure that “the harmony and good feeling which ought ever to characterize a liberal profession” has been greatly increased. The friendly intercourse which now subsists among a large body of professional men, and the mutual good offices which are daily performed, indicate an improved condition of our social relations which is truly gratifying, pleasant to the individuals themselves, and beneficial to the art they practice.

If this be a correct, though brief, exhibition of the present state of the profession, I would ask—what are the circumstances which have contributed to this great result. It is true we have been carried onward by the general advance of civilization—the march of intellect; but it must be admitted that other causes have been in operation—causes which have had a more direct influence upon us as a profession; these have been, I think, combination and co-operation. Who shall say what has been accomplished by the various societies and associations which have sprung into existence during the last fifty—nay, during the last thirty years? Who shall estimate the vast amount of benefit which has resulted from our periodical publications, the “Cyclopædia,” the “Libraries of Medicine,” and the re-publication of the works of the older writers, all which owe their existence to combination and co-

operation. I believe that these relations have been productive of the greatest benefit; they have called out talent which would have been lost to the world, and useless to the possessor, if it had not been for the stirring influence of these associations. They have led to the simultaneous investigation of obscure and undecided questions in etiology, pathology, and therapeutics; they have, in fact, mainly contributed to the literary and scientific position now occupied by the profession, and to the harmonious relations which subsist between its several members. But it will be said that these associations themselves indicate the existence of the very things they are stated to produce. I will admit that they do indicate the effort, but I also state it as my full conviction that much of this effort would have been abortive without the benefit of union and co-operation.

Entertaining these views on the subject of associations, you will be prepared to hear that I have formed a very favourable opinion of the *Provincial Medical and Surgical Association*. It may not have accomplished everything which every member would have desired; it may not have been political enough for some, or it may have taken the wrong side in the opinion of others; but with all the defects which the most fastidious could point out, I believe it has, nevertheless, been productive of most beneficial results to the members of the medical profession in the provinces, and I am sanguine to believe those results will greatly increase and extend, when the principles upon which the Association is based are better known and more thoroughly understood; in other words, when the blood, which has been so effectually decarbonized and which is circulating so beneficially in the larger trunks, shall reach the capillaries—the ultimate ramifications of the body professional, we shall have the gratification of seeing the medical staff of our smaller towns and villages partaking of these literary, scientific, and social benefits, which those who reside in the cities and larger towns have learnt to prize so highly.

The Secretary then read the

REPORT OF COUNCIL, which was

“Your Council, in presenting their usual report to the members of the Yorkshire Branch of the Provincial Medical and Surgical Association, now assembled to celebrate their annual meeting, cannot refrain from casting a retrospective glance on the successful career of the Branch since its first establishment within these walls.

“A modest sphere of action was then proposed, to include York only and its immediate neighbourhood, but our brethren at Leeds, ever forward in zeal and intelligence where the interests of one common profession can be advanced, offered to co-operate with us, and thankful have the founders of this institution been, that they have thus been enabled to form friendships and acquaintances, which would otherwise have been denied them, or deferred for years. Though the East York Branch declined the invitation to join our ranks, we soon had an accession from Sheffield, and other parts of this great county; and the successful meeting at Sheffield in 1847 afforded a most signal proof of the hearty co-operation on the part of our Sheffield brethren in the objects of the Branch.

“The meeting at Leeds last year was most satisfactory, both in the unanimity displayed during the transaction of the general business, and in the interest excited by

the valuable papers and interesting communications afterwards submitted to the meeting.

"Your Council have had their attention directed to the pecuniary affairs of the Parent Association, and they have to express regret that the subscriptions of members are not paid more regularly. Your Council are of opinion that this state of affairs might be obviated to a considerable extent, as far as regards this county, by including, as a matter of course, all the members of the Association residing in Yorkshire in this Branch, (especially as no additional subscription would be entailed upon them,) and requesting each member to pay his subscription either to the Branch treasurer, or to some one appointed by him in the large towns or other suitable localities, who should account to him for sums thus received. This mode would put an end to the annoyance which on several occasions your Treasurer has been subjected to from the present irregular mode, for some members pay their subscriptions to himself, and some directly to Worcester, while others give theirs to a friend to transmit with his own; it has happened that unpleasant applications have been made for subscriptions which have been paid otherwise than to the party applying. Such a plan would cause the subscriptions to pass through one person to the Treasurer of the Association, and your Treasurer, with your approval and that of the General Council, is willing to organize such a plan for this county, and to carry it into effect."

"The present state of the Poor-Law Medical Relief question seems to offer a reasonable hope, that the claims of the medical practitioner, to a fair remuneration for his services, will receive the favourable consideration of the Legislature. Nothing can surely be more unjust than that the members of a profession, whose services to suffering humanity, (though not sufficiently appreciated by those who estimate a man's charity by a pecuniary standard, which in most cases demands little personal sacrifice,) are not surpassed by those of any other body of men, should have been thus treated by those on whom the administration of the Poor-Law Act has devolved. In addition to the burdens now endured by the members of the medical profession, they cannot surely be required by the State to relieve it of its bounden duty to administer to the wants of its poorer subjects, by thus having arbitrarily enforced upon them an almost gratuitous labour. The lawyer is always paid for his extra labour. Why then should his medical brother, though not represented in the Cabinet or the Government, not have equal justice meted out."

"Medical Reform, until lately in a condition of suspended animation, has once more given signs of life, and occasioned some anxiety to the medical mind to secure to the patient a sound and vigorous constitution."

"Your Council are decidedly opposed to the establishment of a College of General Practitioners, and feel surprised that a comparatively small body of practitioners, resident in the metropolis, should have arrogated the right to represent the opinions of their brethren in the provinces. Your Council are of opinion that the profession is already too much divided, and that another medical corporation separating the general practitioner still more decidedly from the physician and the surgeon, if such could be done in the provinces, would only introduce a new element of discord and confusion where too many already exist. If any one will run over the list of members of the Parent Association, avowedly a provincial one, he will find the names of men who, though now Fellows of the College of Surgeons, are still general practitioners. Shall these men, many of whom have gained for themselves a reputation co-extensive with civilization itself, be subjected to the rule and control

of men, of whom few are known beyond their own immediate sphere of action, and who have added so little to the literature of our profession? If any one has acquired by labour, study, and purchase, the right to be enrolled among the surgeons of England, is he to be told that he must take a downward step, no longer presume to call the pure surgeon his brother, but quietly descend into the proposed lower grade of "General Practitioners?" If the principles so often put forward by the Parent Association, as those only on which a satisfactory settlement of this intricate question can be based, were passed into law, we should be spared comment on so many hasty and impolitic schemes of Medical Reform."

"Your Council beg to recommend Sheffield as the town at which the annual meeting for 1850 should be held, and they feel assured that a meeting in a town which furnishes, through the industry and intelligence of its sons, so much valuable matter to our Journal, will be looked forward to with interest by every one who values the progress of medical science. Every one who was present at the meeting at Sheffield in 1847 must look for a similar intellectual and social treat."

"Your Council cannot conclude this Report without adverting to the loss which every one connected with the Association has sustained in the lamented death of its secretary Dr. Streeten. Some men seem raised up by Providence, whose peculiar talents and qualifications at once mark them as fitted for particular occupations. The intelligent and reflecting mind of our lamented friend at once fitted him for a successful cultivation of medical and general science; while his business habits enabled him to carry his usefulness to a wider sphere, and to superintend the working of this wide-spread Association, to whose progress the broad Atlantic has not set bounds. Respected when living, lamented when dead, the name of Streeten needs no costly monument to perpetuate its memory, for every meeting of the Association and its members will for ages be a record of him, who by his ability, industry, and moral worth has contributed so much to the prosperity of the Association, for whose good he so ardently laboured. *Si monumentum queris, circumspice.*"

"Animated by the example of those who have preceded us, in a career of useful labour for the good of their fellow-men, let us, to whom life and strength is now vouchsafed, pursue a like course of anxious endeavour, that we, in our generation, may not come short of the privileges and opportunities which have been afforded to us by a wise and benevolent Providence."

Mr. S. Hey moved, and Mr. Hornby seconded, the adoption of the report, which was carried unanimously.

The following resolution proposed by Mr. R. Hey, seconded by Mr. H. Jackson, was unanimously agreed to, after many of the members present had expressed their entire concurrence in its purport,—"That this meeting adopt the opinions expressed in the report respecting the proposed College of General Practitioners, and strongly deprecate the establishment of any such new medical corporation, and that this resolution be transmitted by the secretary to the Central Council, at Worcester."

On the motion of Dr. Goldie, seconded by Dr. Sandwith, Sheffield was appointed the place for holding the Annual Meeting for 1850.

Dr. Manson, of Sheffield, was unanimously chosen President-elect.

The Branch Council was re-appointed. Mr. Husband was re-elected Secretary and Treasurer.

The following communications relating to the science of medicine were then made to the meeting:—

CASE OF NECROSSED TIBIA.

Mr. R. Hey presented a necrosed tibia, of which he gave the following account:—Miss W., aged 18, in August, 1848, was seized with a violent pain in the knee, which continued for about twenty-four hours, and was succeeded by pain equally severe in the ankle, accompanied with swelling and redness. The pain gradually extended along the whole length of the tibia, and in about a week suppuration was detected about an inch below the tubercle of the tibia, and several sinuses were formed lower down. About the end of September the patient, whilst walking across the room, felt the bone give way. Her medical attendant finding that fracture had taken place (most probably to satisfy the patient), placed the limb in splints, which were retained until the beginning of December, when Mr. R. Hey was requested to visit the patient. As no union could be hoped for, and the patient's health was rapidly declining, immediate amputation was recommended, which, under the influence of chloroform, was successfully performed three days after, and the patient rapidly recovered her health.

The whole shaft of the tibia was found to be in a state of necrosis. Considerable effort had been made by the formation of bone to repair the mischief, but the patient's rapidly-declining health would not have allowed the completion of the reparative process.

Mr. Hey noted, in conclusion, the chief point of interest in the case,—viz., the extreme rapidity with which the vitality of the bone was destroyed, probably within a fortnight.

ON THE USE OF CHLOROFORM.

Mr. H. Jackson then offered some observations on the use of chloroform, and especially on the mode in which it can be most safely administered as an anæsthetic agent. He also made some observations on the fluidity of the blood in fatal cases, and concluded by stating it as his opinion, that though few fatal cases had occurred, and its use, in many cases, was beneficial in saving the patient from the shock of the operation, yet its administration could not in any case be said to be devoid of danger.

Mr. S. Hey, after some interesting observations on the use of chloroform, directed the attention of the meeting to the late work of Dr. Warren, of America, in which were contained the examinations of several fatal cases, in some of which fluidity of the blood was present.

Dr. Sandwith, in reference to the dose which is generally required to produce insensibility, related a case in which, previous to amputation of the thigh, as much as two ounces of chloroform were, in gradually increased doses, administered, before the requisite anæsthesia was produced. Dr. Sandwith, and all the speakers, during an animated discussion, agreed that the inhalation should take place as slowly as possible, to secure a proper admixture of atmospheric air.

The President stated the *post-mortem* appearance of a case, in which, however, chloroform cannot be said

to have destroyed the patient, as the patient lived for seven days, and for three or four days after the operation seemed to be going on favourably. In this case the blood was fluid.

CHANGE IN THE CHARACTER OF DISEASE.

Mr. Husband then directed the attention of the meeting to the change in the character of disease which has been gradually taking place for several years. Inflammation in an acute form, requiring free and repeated depletion, was now rarely, if ever, met with, and even when all the symptoms of inflammatory action were present, the disease yielded to mild treatment, while active measures were soon followed by extreme prostration, and in many cases by a low typhoid condition. In continued fever, too, the first symptoms of excitement soon gave way to extreme debility, and in some cases wine, quinine, and stimulants were required after a few hours from the first onset of the attack. Purgatives, in many states, required to be given with great caution, and in short, whether we acknowledge a cycle of disease, as laid down by the recent German writer, or not, we cannot close our eyes to the fact that the tendency of diseases, as now seen, is to pass into a state of debility, and that all depletory measures ought to be employed with great caution; and with reference to this tendency, Mr. Husband gave some cases as bearing out the opinions advanced, and appealed to many who were present from various localities, to say whether their experience of the prevailing character of diseases corresponded with that now offered to their notice.

Dr. Sandwith, Mr. S. Hey, Mr. Hornby, Mr. Ness, Mr. Powell, and other members, stated that they had observed a similar change in the character of disease in their own spheres of practice.

Dr. Simpson, after expressing his concurrence in the views just propounded, entered into an interesting historical argument to show, that from the writings of the most eminent medical authors, as expositors of the character of disease in their day, an argument might be deduced strongly confirmatory of the opinion that diseases, in their changes, observe a certain cycle.

COD-LIVER OIL.

The President introduced the subject of cod-liver oil, and as far as the time allowed, entered into an account of some of the remarkable results which have been obtained from its employment.

The hour of dinner having now arrived, a vote of thanks was unanimously passed to the President, and the members proceeded to dine together at the George Inn, where, under the Presidency of Dr. Goldie, who officiated for the President, the greatest good feeling and harmony concluded one of the most interesting meetings held by this Branch.

SOUTH-EASTERN BRANCH MEETING **OF THE PROVINCIAL MEDICAL AND** **SURGICAL ASSOCIATION.**

On Wednesday, the 27th of June, 1849, the fifth Anniversary Meeting of this Branch Association was held at the Town Hall, at Brighton, when the following gentlemen were present:—

George S. Jenks, M.D., William King, M.D., Thos. B. Winter, John Cordy Burrows, George Royde, James Dixon, Thomas B. Horne, William St. George Davies, M.D., Thomas Blair, M.D., Benjamin Vallance, George Drummond, John Dill, James Arnott, M.D., William, Kebble, M.D., Edmund Joseph Furner, William Verrall, Augustus Franz, M.D., Robert Caudle, George Lowdell, John Lawrence, junior, Jas. Oldham, William H. Fry, John Scott, Gavin Elliot Pocock, William Faithful, Thomas Ralf Simonds, Brewster Thomas Seabrook, and Alexander R. Brown, M.D., all of Brighton; William Harris, and Henry Collet, of Worthing; Thomas Martin, of Reigate; Peter John Martin, and Robert Martin, of Pulborough; James Crang, of Tinsbury; George Weeks, Henry M. Holman, M.D., and Constantine Holman, of Horsham; James Mackness, M.D., of Hastings; Charles Trustram, of Tunbridge Wells; Ch. H. Butler Lane, M.D., of Ewell; Joseph McCarrogher, M.D., and Nicholas Tyacke, M.D., of Chichester; Thomas Hunt, Francis Sibson, M.D., and Henry Gilbert, of London; James Steadman, and Albert Napper, of Guildford; William Newnham, of Farham; Richard N. Trew, of Steyning; Francis Plomley, M.D., Maidstone; George Bottomley, of Croydon; Thomas Spry Byass, of Cuckfield; and James M. Cunningham, M.D., of Hailsham.

Mr. Hargraves, of Tunbridge Wells, being unavoidably and regretfully prevented attending the meeting,

At one o'clock Dr. Jenks was requested to take the chair; when the Secretary read a letter he had received from Dr. Hall, late of Brighton, who had been appointed President at the Tunbridge Wells meeting last year, and who had accepted the office, expressing his inability to attend the meeting on this occasion, with his cordial good wishes for the success of the Society, and sentiments of great respect for all his former friends and colleagues in the South-Eastern District, whereupon Dr. Jenks, as senior Vice-President, was constituted President of the South-Eastern Branch, and delivered the following address, premising that gentlemen, not members of the Branch, who had done the Association the honour of accepting the invitation, should consider themselves associates for the day, with all the privileges of membership.

ADDRESS OF THE PRESIDENT.

When it was first proposed to me to fill the post which I have now the honour to hold through your favour, the novelty of the situation and the fear lest my short-comings might disappoint your expectations, induced me to decline the task; nor should I now appear as President of this distinguished assembly, had I not been summoned, as Vice-President, to fill up a vacancy which had unexpectedly occurred. Dr. Hall's letter to the Secretary, which you have heard read, sufficiently explains the matter. I can only join

my regrets to those of the members present, that we have lost the pleasure of his company and the benefit of his services, on this occasion; for I am very well aware that he was better qualified than I am to fill the duties of the presidential chair.

In consideration, therefore, of my inexperience, I must entreat you to regard my deficiencies with indulgence, and to extend your forbearance towards me, not in the ratio of my ability, but of my zeal in the cause, and of my entire devotion to your service. In the name of my colleagues and myself, I beg to offer you a right cordial welcome to Brighton, and to express the pleasure and gratification which we feel in seeing assembled here this day, the members of the South Eastern Branch of the Provincial Medical and Surgical Association. This Branch Society has not been long established. On this day it celebrates its fifth anniversary; yet, in that short space of time, it has already attained a distinguished position, not only from its numbers and respectability, but from its labours and usefulness. We hail this local gathering of the medical practitioners of the South-Eastern Counties; and we trust that the reception which you will meet with may dispose you to repeat the honour you have now conferred upon us, and also that the Parent Society may be induced to accept the invitation we purpose sending them, to celebrate their annual meeting next August twelvemonth in this town.* As some few gentlemen present may possibly visit Brighton for the first time, and others may be but little acquainted with its topography, a few brief hints may not be unacceptable to those who have inclination or leisure to profit by them. Brighton has now become a place of considerable importance. Since it was first chosen as the favourite marine residence of the Sovereigns of this country (an attraction which it has now lost) it has rapidly advanced in extent and population. The sea front is two miles and a half in length; and, with its splendid sea walls, which are deserving attention, its elegant mansions, and its magnificent sea views, is the finest thing of the kind in Europe. Some idea of the wealth and importance of the town may be formed from the following facts:—The population since the last census is computed to have reached 50,000; the inhabited houses are 10,000; there is accommodation for 30,000 visitors; and the post-office delivers in Brighton, upon an average, 45,000 letters per week, or 2,340,000 letters per annum. Three local weekly newspapers are well supported and widely circulated; and somewhere about eighty members of the medical profession are settled here, and find active employment. Of the public buildings, the most remarkable are the Pavilion, which is now dismantled, but which, from its associations with the past, may excite the curiosity of some members; the Chain Pier, an object of great attraction to strangers; the Town Hall; the Fountain on the Old Steine; the Market House; the Railway Terminus; the beautiful Viaduct spanning the valley through which the London Road passes; St. Mary's Hall, for the education of the daughters of the poor clergy; and the new College, not yet finished. Of the Churches, the most worthy

* We think it right to apprise the members of the South Eastern Branch that a requisition has been very numerously signed, to hold the Annual Meeting at Hull next year, and forwarded to the Council at Worcester.—ED. JEVAN.

of note are the Old Church, with its church-yard and cemeteries; St. Peter's, a fine modern specimen of the Gothic, by Barry, the style that of the 14th century; St. Paul's also is a fine structure. To the lovers of the fine arts, a visit to the Roman Catholic Chapel will be agreeable. It contains a splendid marble altarpiece by Carew. The charitable institutions are numerous and well supported. The Sussex County Hospital, established 1828, is a fine spacious building, well ventilated, and entirely isolated, having 120 beds generally occupied. The wards are lofty, some large and some small. The proportion of air to each patient averages about 1100 cubic feet. There were 970 admissions last year. Of these, 153 were accidents, and 123 urgent cases, admitted immediately, many of them without letters of recommendation. The Dispensary has been forty years established. A new building for this Institution has been recently erected, but is not quite finished. It promises to be a great ornament to the town. Nearly 6,000 people were relieved last year either at the Dispensary or their own homes. The Infirmary for diseases of the eye is another valuable institution, to which must be added a self-supporting Dispensary, and a Lying-in Institution. Besides the above named, there are many other establishments for various benevolent purposes. The German Spa, where the most celebrated mineral waters of Germany and Bohemia are artificially prepared, is highly deserving of attention. The mode of preparing these waters combines, in an admirable manner, chemical science with mechanical skill. The Director has most kindly offered to explain the whole process, and to exhibit the machinery to any gentlemen who feel disposed to visit this establishment. To show you that we of the profession at Brighton have at length roused ourselves, I am happy to inform you that a Medico-Chirurgical Society has been established, which only last week celebrated its second anniversary. It already reckons sixty-four members, and is in all respects flourishing and very ably supported. I will not detain you with further particulars, though many things remain which might interest you, did time permit.

For the same reason, that is, to spare your valuable time, I shall only make a few observations conformably with custom, and simply as an introduction to matters of greater moment. In the report of the Committee, some subjects will be touched upon, involving the deepest interests of all classes of the profession, which, indeed, have long engaged the anxious labours of many eminent persons who have been deputed to undertake their final settlement. To expect perfect unanimity upon certain subjects is quite hopeless; but of this one thing, I feel quite sure, that you are all unanimously disposed to uphold the dignity of the profession, to promote its advancement scientifically and politically, and to extend its benefits widely to our fellow men. With this impression, I cherish the hope that the proceedings of the South-Eastern Branch Association will be conducted with the same equanimity and the same cordiality on this occasion as on those which have preceded it. A report, carefully drawn up, and some valuable and instructive communications, will come before you, and be received, I have no doubt, with the attention they deserve.

When you retire to your respective abodes, I need

not particularly direct you to the study and observation of the pestilential cholera which still continues to afflict the land. Whenever you are called upon to grapple with this mighty enemy of our race, I am sure you will be diligent in observing and collecting facts, which haply, some day, may turn to good account. But before I conclude, I would fain briefly notice the subjects of quarantine and contagion, which are likely soon to be brought before Parliament. In approaching these difficult and disputed questions, let us do so with becoming earnestness and real singleness of purpose. Let us put aside all consideration for the mere pecuniary interests of the commercial classes, and rest our proceedings on the broad basis of the public good. Above all things let us plead the cause of the poor man, to whom it is a matter of life and death, and who can neither gain the ear of the minister, nor purchase the advocacy of a venal press. These subjects have lately been brought forward in a manner so prominent as to provoke discussion. Let us be mindful only to conduct it in a calm and philosophical manner, so as to form a contrast in some measure with the flippant and dogmatic style in which certain startling doctrines have been promulgated in a recent manifesto.

The minutes of the meeting last year at Tunbridge Wells were then confirmed; and by an unanimous resolution the grateful acknowledgments of this meeting were awarded to the officers and committee of the past year, for their services on behalf of this Association.

The President then called on the Secretary to read the Report of the committee to the members assembled at this meeting, as follows:—

COMMITTEE'S REPORT.

The committee of the South-Eastern Branch of the Provincial Medical and Surgical Association, desire on this, as on previous occasions, to exercise the pleasing duty of offering to the attention of their friends and neighbours of the South-Eastern Counties, such observations as may be supposed, at the present time, to be appropriate, on the public affairs of the profession, as well as on its science and practice.

Last year, the consideration of the all-important subject of medical reform, was taken up in a liberal and comprehensive spirit by delegates from the various colleges and corporations of England, Scotland, and Ireland, acting on behalf of themselves and their constituents.

The "principles" agreed upon, after mature deliberation, had the unanimous assent and approbation of all the delegates constituting the conference committee, and it therefore may be fairly considered that they were worthy of the adoption of the whole medical profession, as the best arrangement attainable under the existing circumstances. Of late, however, obstacles have been presented which are likely to delay the proceedings towards the settlement of the medical question which public-spirited and patriotic men so much desire, and which is so all-important to the peace and harmony of the profession.

The pleasing prospect of last year is therefore unhappily for the present, somewhat overshadowed. Your committee beg, however, to express their hope that the unexpected difficulties and opposition which have arisen, may, by judicious management on the part of the respective bodies concerned, be removed and reconciled.

Until satisfactory legislative arrangements have been effected, your Committee beg permission to recommend to their associates to persevere with untiring energy in the cultivation, not only of our common profession, the science and the "art divine" of healing, which is an imperative duty, but also of generous sentiments towards each other, of mutual and amicable confidence, and at the same time, forbearance, of habits of mind and of manners, and of all the qualities and qualifications which can adorn and dignify the gentlemanly character, and distinguish the members of the profession, as men of benevolent and liberal sentiments, as well as of most enlightened minds.

The subject of Poor-Law medical relief cannot be passed over by the Committee, although they have little that is satisfactory to say upon it.

The Committee of Poor-Law Medical Officers in London have continued their exertions to press the subject on the notice of the Poor-Law Board, the Government, and the Legislature.

At a public meeting held in London in February last, Lord Ashley, in forcible terms, stated the grievances which oppress both the medical profession and the poor, and clearly stated the alterations which would remedy the evils complained of.

More recently the Poor-Law Medical Committee have had an interview with Mr. Baines, the chairman of the Board, at Somerset House, and in detail explained to him the anomalous and unsatisfactory position occupied by the medical officers, and the remedies proposed.

Mr. Baines admitted to the full extent the grievances complained of, and the propriety of administering a remedy; but he dwelt upon the financial question, as throwing a serious, in fact, the most serious obstacle in the way of settlement.

Mr. Baines took the opportunity of stating the pleasure and surprise with which he noticed the excellent way in which the Poor-Law Surgeons throughout the country performed their duties.

They may accept the compliment with satisfaction as coming from a conscientious and well informed gentleman. Yet it may be a bitter reflection that this very excellence, — this meritorious conduct of the Poor-Law medical officers is an obstacle in the way of their receiving that justice which they have so long sought, and to which they are acknowledged to be so fully entitled.

Were the work less well done, a remedy would be sooner be found.

Did instances of neglect and inattention multiply, the evils of the present system would force themselves upon the attention of those who could adopt a remedy.

Fortunately for the sick poor, and to the honour of their medical attendants, the cases are few indeed in which the latter are influenced by other considerations than the need, the urgency of their cases, and the helplessness of those to whom their professional assistance is devoted.

A consciousness of this will give support in the midst of the apathetic indifference shown by the public on this question, and which it must be confessed is shared by too large a portion of the medical profession.

Your Committee therefore cannot too strongly urge all gentlemen, whether Poor-Law Medical Officers or not, to give support to the Committee in London; and to endeavour to interest non-professional persons in the

improvement of a system which at present is fraught with injustice to the profession, and is not free from danger and disadvantage to the sick poor.

Had the great body of the profession a central organization which really represented its wants and wishes, it would be impossible for a system so injurious to the profession, and to the public, to be continued.

At the annual meeting of the Parent Association last year at Bath, the committee appointed for that purpose presented a report as to the amendment of the laws, among which was one of caution to be observed in the proposal of candidates for admission. Likewise as to the most eligible mode of treating the moral or professional misconduct of members, should any cases of gross delinquency unfortunately occur.

On which your committee will make no further observation than to recommend gentlemen to be very careful in the proposal of candidates for membership, that they are in every respect eligible and unexceptionable.

Among the various remedies recently introduced into practice, although not newly discovered, is the cod-liver oil. Of late it has increased rapidly in repute, as being eminently useful in the treatment of several forms of disease to which it had not previously been applied.

The subject is directly adverted to in the number of our Journal for the 30th ultimo, in a leading article, in these terms:—

"After ages of hopeless research, we have been lately startled with the announcement that a remedy for phthisis pulmonalis had been found.

"We have the authority of an eminent physician, a worthy pupil of the school of Louis, that consumption of the lungs has been cured, and that every day's experience increases his astonishment at the effects produced by cod-liver oil in catarrhetic deposits.

"Now, here is a subject worthy of attention for an Association which numbers among its members so many men capable of entering into the inquiry, whose practice will give them the means, and whose love of their profession the will and the spirit to carry it out. The, alas! sole remaining editor of this Journal has undertaken to conduct this enquiry, with the assistance of the members of the Association. Let us urge upon those who attend the 'approaching' meetings not to lose sight of this important investigation. Desultory information will be of no value; every particular in registering the facts must be noted down clearly—the name, age, sex, temperament, hereditary tendency, stage of disease, previous history, present condition, physical and general symptoms, progress of the case, with every particular of treatment, must be noted down, and the results, under any circumstances, will prove a most valuable report upon the disease.

The committee are of opinion that a report founded on such observations, and extended over a sufficient space of time, of perhaps two years, might be one of the most valuable documents ever devoted to the interests of science and humanity.

In the same number is also a valuable letter on the same subject by Dr. Toogood, of Torquay, who has, on former occasions, favoured the Association with many valuable practical communications through the Journal.

The subject of the administration of chloroform is one which your committee would recommend to the attention of members, that the experience of its effects may lead to correct conclusions as to a proper discrimination of cases in which its safe or its hazardous application may be expected.

With respect to the Benevolent Fund attached to the Association, it is well known to every member that Mr. Newnham, of Farnham, has always, and upon every occasion, advocated the subject with the greatest spirit, vigour, and eloquence at the annual meetings, as well as by his pen in the pages of the Journal.

Since Mr. Newnham's appointment as the successor of Dr. Conolly, he has been, indefatigable in pleading the cause of the indigent widow and orphan, and of the incapacitated and worn-out practitioner.

At the last annual meeting at Bath, Mr. Newnham, was able to announce a considerable augmentation of the fund; and if this 'excellent' man should favour this meeting with his presence, he will, in all probability, have the satisfaction of informing the gentlemen present of still further improvement; and at the same time, of the necessity of increased exertion and contribution towards the relief of the destitute widows and orphans of our unfortunate brethren of the profession.

Very recently the society has had to lament the loss of a very valuable member, in the Secretary and principal Editor of the Journal.

Ever since Dr. Streeten's appointment, as the successor of Dr. Hastings, he has been indefatigable in the discharge of the duties of his office, and perhaps the conscientious fulfilment of those duties, with his other avocations, involving a laborious devotion of time and thought, may have contributed to produce that kind and degree of loss of health, or of deterioration of the powers of his constitution, which rendered him an easy victim to the attacks of acute disease.

Dr. Streeten, as our Secretary, was correct and punctual in everything concerning the business of his office.

Until lately he was the sole Editor of the Journal, and did not only his best, but the best that could be done, with the materials furnished to his editorial care.

In his intercourse with his professional brethren at the annual meetings, and doubtless at all other times, he was always most kind and friendly, and gained for himself amongst us a reputation for all good qualities, and an honourable name.

The authentic and particular details afforded by the memoir of Dr. Streeten in the last number of the Journal, with just and appropriate eulogy, will render unnecessary any more lengthened notice of him in this place.

[The conclusion of these proceedings will appear in a future number of the Journal.]

BATH AND BRISTOL BRANCH MEETING.

OF THE ASSOCIATION.

The Eighth Annual Meeting of the Bath and Bristol District Branch of the Provincial Medical and Surgical Association was held at the Medical Library, Orchard Street, Bristol, on Thursday, July 5th. J. C. Swayne, Esq., President for the ensuing year, took the chair. The following gentlemen were present:—

Drs. Boley, Trotman, Rogers, Budd, H. Fox, James, Stanton, of Bristol; Bardsley, of Manchester, Davies, Lindoe, and Hodges, of Bath; Messrs. Swayne, Gillow, Ruddock, Sinerdon, Prichard, J. G. Swayne, Burroughs, Humpage, H. Swayne, Surridge, J. Lancaster, Nield, Martin, Godfrey, Godfrey, Clark, Colthurst, of Bristol; King, Bartrum, George, and Cox, of Bath; Vicary, of Warminster, Collens, of Chewmagna, Washbourne, of Corsham; Godfrey, of Yatton Keynell; Crang, of Tinsbury; Flower, of Chilcompton; Jennings, of Laycock; and Ogilvie, of Stapleton.

The business of the meeting commenced by Mr. Flower, of Chilcompton, the retiring President, taking the chair and stating, that as the duties of his office ended that day, nothing more remained for him to do than to express his thanks for the courtesy and respect he had received at the hands of the members of the Society while he had occupied that chair, and to introduce his successor, which he begged them to do.

Mr. Swayne then took the chair, and said he felt very much flattered by the honour they had done him by placing him in that position, but at the same time he wished to observe that the circumstances of his age and standing in the profession had rather weighed in making the election than that he was peculiarly fitted for the post. He would not take up much of their time or trespass upon their patience by a long and tedious retrospect of the progress of medicine during the past year; he would merely advert to the operations of the Bath and Bristol Branch of the Association during that period. By the report which would be read, they would perceive that the Society as far as regarded its individual members, and especially those from the country, had not been idle. A considerable number of very valuable papers had been read, and interesting cases brought forward, some of which had been published in the Journal and others about to be so, which he was sure was putting on record much valuable matter, and greatly adding to the general stock of information. He might be pardoned for remarking that they were indebted considerably to the exertions of their country members, and that the society, in its aggregate and corporate capacity, had not been so energetic or active as could have been expected in some particulars. He therefore begged to suggest a course, which if adopted by the Society, would extend its action and by which the profession at large would be very much benefited, namely, by instituting statistical enquiries, and collecting and arranging extensive statistical information upon all those questions which agitated the profession, and which would tend towards reconciling the discordant opinions that were constantly arising on important matters connected with new views on doctrinal points, and new and popular remedies and modes of practice. They had many praiseworthy individuals who had done that work for them hitherto, but it was evident that the want of success was often owing to the fact of not applying that kind of authority to it which a numerous society could. Many societies had begun to do so in London, and one lately established in Bristol was carrying into effect the proposition he then laid before them. He thought much good would result if the society was to collect all the statistical information they could with respect to the Asiatic cholera, which was at present raging in most parts of Europe, the continent of America, and had established

a footing in this city. He would, perhaps, be better understood if he illustrated his position by a single instance that immediately occurred to him, amongst many that might be adduced. He had been, in the earlier period of his life, extensively engaged in the obstetrical part of his profession, and for many years employed in teaching that branch in the Bristol Medical School. From those circumstances, it naturally occurred that many of his younger and less experienced brethren were in the habit of asking his advice and assistance in any difficult and dangerous cases that might occur to them in their practice; and there were no cases more dangerous to the patient and appalling to the practitioner than those sudden and violent hemorrhages which sometimes occur in the latter months of pregnancy. He then proceeded to describe the practice which had hitherto prevailed in those cases, and the doctrines upon which that practice had been founded. He then stated that a learned professor in a neighbouring university had introduced new views, and had founded upon them a new mode of practice, and that no question had been so frequently and earnestly put to him by those who had consulted him, as which of those modes of practice he would prefer. To that question he was sorry he could give no better answer than that, as far as he could judge, from a comparison of his own experience with the statements of the professor in question, he very much preferred the old mode. Yet it would be most desirable that some more extensive and impartial statistical comparison of the results of the two modes of proceeding might be instituted to decide definitely their relative value. That desideratum, the action of this Association in its aggregate capacity was well calculated to supply, as the necessary information would be more readily afforded to it than to any individual member.

Mr. John Bartrum, of Bath, Hon. Sec. of the Bath District, then read a few extracts from the report of the past year for the Bath District. After which

Mr. J. Colthurst, Hon. Sec. of the Bristol District, read the report for the last year.

REPORT OF COUNCIL FOR 1849.

The Council of the Bath and Bristol Branch Association have much pleasure in meeting the members at this their eighth anniversary, and laying before them a report of their proceedings for the past year; in doing so they have first to notice the change which has occurred in the Bristol Secretaryship. The majority of the members are doubtless aware that their late Secretary, Mr. Hetling, has seceded from the medical profession to enter upon the clerical, and thus of necessity vacated the office in which he had served your Association from its very formation. Your Council felt it incumbent on them, in accepting this resignation, to acknowledge immediately with their best thanks the long period during which he had kindly acted for them, and they are desirous that you should also take this opportunity of recording your testimony to his merits. It then devolved upon your Council to fill up the vacancy thus occurring in the interval of your annual meetings, and they unanimously elected Mr. Colthurst, one of your earliest members, who, feeling much interest in the welfare of your Society, was willing to undertake the duties of this onerous and responsible office. It will rest with you to confirm the choice by re-electing him, with Mr. Bartrum, for the ensuing year.

Your Council have also to notice with extreme regret the loss the Association has sustained in the early and premature death of Dr. Sireeten, the Secretary of the Parent Society, and Editor of the Journal. This gentleman had so completely won the good opinion of the members of the Association, by the zealous and affable discharge of his arduous duties, that your Council feel assured it will only be consonant with your wishes for them to propose a vote expressive of regret at his loss; and, having done so, they would direct your attention to the arrangement proposed by the Central Council for appointing his successor. They, the Central Council, recommend that the two offices of Editor and Secretary for the future be separate,—that Mr. Sheppard, of Worcester, formerly one of your honorary secretaries, be appointed Secretary,—and that, as there are several candidates, a Committee be chosen to consider the election of an Editor. Your Council congratulate you on the precaution thus taken in filling up this important post. They look upon a Committee of inquiry as a step in the wisdom of which you will fully concur; and being themselves forcibly impressed with the fact, that one of the most marked advantages derivable from this separation of the two offices, is the greater scope it will afford in which to seek an Editor, they conceive it desirable for you to express your views on the subject. They believe that you will cordially agree with them, that in a matter so all-important to the character and literary repute of the very large body of the profession enrolled in your ranks, there is an imperative duty to use every effort to insure the first assistance to obtain such talent as shall not only reflect credit on the Association, but shall infuse by its example a wholesome influence into the writings of the contributors to your periodicals. And should you uphold them in this, they would suggest to you the propriety of conveying your opinion and wishes to the Central Council, as a substantive resolution, expressive of your desire that in the selection of your future Editor, the peculiar fitness of the individual should be the point regarded, rather than the city in which he resides.

Beyond these points nothing special has occurred wherewith they may now stimulate your curiosity. It is the peaceful and quiet stream, rather than the ripple, which marks the steady progress of your Society, and upon which the Council would take leave to congratulate you. They would point not only to the increased numerical strength, but to the continued and continuing zeal for its welfare. They would refer with pride to their numerous brethren from the rural districts, working early and late, to be the members most constant in their attendance, and cheerfully acknowledging the pleasure and the benefit to be derived from our reunions. Should we not be grateful to those noble minds who have gone before, and who have left us as their best legacy, not only the spotless name, the illustrious character;—but who have, as it were, breathed upon us a portion of their spirit, and formed us into a body instinct with life? Yes, this should be our holy endeavour. And when we refer this day to the obituary of the last year, and learn that we are to chronicle the decease of our first President, Dr. Prichard, a man whom you thus delighted to honour, hoping thereby not only to mark your esteem, but to catch a ray of his reflected light, your Council would call upon you to show your true veneration for such a character, by following in his footsteps, imitating his untiring zeal in professional and scientific pursuits, and in studiously pursuing his bright example of firmness, integrity, and professional propriety. Your Council forbear to expatiate further on the many great and good qualities of our ever-to-be-honoured friend. They are

gratified with the fact, that it was thought right to mark so great a loss immediately upon its occurrence, and they felt a satisfaction in knowing that this duty was undertaken by one who possessed not only the talent, but from familiar intercourse the peculiar knowledge, requisite to do it well. The elegant cloge read at your last quarterly meeting, by Dr. Symonds, and since published and presented by the author to each member of our Branch Association, fully justifies your Council in their anticipation.

Your Council may, perhaps, be excused for having been somewhat carried away in the fulness of their admiration for Dr. Prichard; but they would not have you forget the facts by which they are to prove, that the end and aim of your Association, the point for which our revered friend laboured, is constantly and steadily advancing. The absolute numbers are—

Bath	37
Wiltshire	19
Somerset " " " "	20
Gloucester " " " "	6
Bristol	40
Total	122

There are six new members within the last two months.

The following very valuable papers and cases have occupied your evening meetings, and the majority of these have been published in the Journal. They are—

At the first Bath Meeting.

- "On Poisoning by Prussic Acid, with Observations on the Relation of such Cases to Moral Insanity, and Medico-legal Medicine." By J. B. Daniell, M.D.
- "History of a Case of Rheumatic Paralysis, treated by Electro-Magnetism, with Observations thereon." By William Davies, M.D.
- "History of Two Cases of Malignant Erysipelas after Parturition, with Evidence of its Contagious Properties." By George King, Esq.

At the Bristol Meeting, September 28th, 1848.

- "Case of Sudden Death, connected with Pregnancy of Four Months, Phlebitis of the Crural and Uterine Veins, and Duodenitis." By R. F. George, Esq.
- "Case of Poisoning by Yew Berries." By J. Lloyd, Esq.
- "Case of Croup in an Adult, fatal in less than twenty-four hours." By G. Normau, Esq.
- "Two Cases of the Tolerance of Large Doses of Opium, in Patients now under his care." By J. Godfrey, Esq.
- "A Conversation illustrative of several points in the History of Asiatic Cholera," introduced by George Norman, Esq.

At the last Bath Meeting.

- "An Elaborate Paper on Scurvy, as exhibited in 1847-8, shewing its Dependence in great measure on the Absence of Potatoes as an Article of Food." By John Barrett, Esq., F.R.C.S.
- "On the Use of Chlorine as an Agent in the Treatment of Febrile Diseases." By Conway Edwards, Esq.
- "On a Case of Imperforate Urethra; and on a Case of Imperforate Anus." By W. C. Jennings, Esq.
- "History of a Case of Laceration of the Perineum during Parturition." By W. C. Jennings, Esq.

At the last Bristol Meeting.

- "An Elaborate Memoir of Dr. J. C. Prichard, &c., &c." By A. Symonds, M.D.
- "History of a Case of Infantile Diabetes, in a Child weaned at Two Months, arising from the continual Secretion of Sugar." By Joshua Parsons, Esq.
- "Cases of Pelvic Abscess, independent of the Puerperal State." By J. S. Bartrum, Esq.

Your Council would thus show you how well your time has been occupied, how fully the intentions of the quarterly meetings have been carried out, how very much of interest has been brought forward by the rural members, and how much more may still be effected by the healthy stimulus of association and emulation. Pointing to what has been done, your Council would fain hope that each member will strive to add his quota to the general fund, and thus individually obtain in the provinces what our metropolitan brethren have hitherto claimed as their own peculiar advantage, as the means to a great end, the opportunity of discovering how little we know, and how much we have to learn.

Your Council would also impress upon your attention another of the advantages derivable from mutual Association,—it is the heart-stirring effect of permitting ourselves to feel for our brethren in distress. Upon looking over the list of subscribers to the Benevolent Fund, they regret to find so few persons yielding a passing thought to its claims; they take leave, therefore, again and again to urge upon you those claims, and while doing so, they would remind each of you, not only of the good that is to be done to the receiver, but of the still greater good that is effected in the heart of the giver, by its being attuned to benevolence and sympathy. Your Council are confident, when they look to the small annual contribution asked for, that as much of this want of support must have arisen from the absence of a regular machinery to bring it before your notice, as from a disinclination to join in so good a work. They therefore recommend to your consideration a plan, proposed by your present Secretary, for having a standing Sub-committee, to consist of the President, past-President, and two Secretaries, who should undertake the duty of collecting this fund, and reporting on the same at the annual dinner when the toast of "The Benevolent Fund" is given, and through whom every application for assistance in this district should be handed to the General Treasurer. They sincerely trust that this system would effect the end of obtaining that support from all which the Benevolent Fund so truly merits.

Your Council before resigning their trust, would, in conclusion, allude to the selection of their successors. They do so because it is the first election under the new rule passed at your last Annual Meeting, and published page 403 of the Journal. A reference to that volume will show that it had been the custom of your Society to re-appoint, from year to year, the individuals who had once been placed on the list of Council, adding merely a new name when a vacancy from death occurred, or any special circumstance seemed to require. It did not escape your observation that this system was of a deadly character, and would at no distant period lead to the most fatal consequences in the negligent performance of the business of the Society. You therefore wisely determined, that those who were inattentive to their duties should be ineligible for the succeeding year; that, indeed, like dead branches, they should be lopped off, rather than remain to obstruct the full development, in which, by the infusion of new vigour, your Council would fain see this most useful Association flourish.

Mr. Humpage then rose and moved the adoption of the report. He said that it was very satisfactory to hear that the Provincial Medical and Surgical Association was in a healthy and vigorous state, their members increasing, and the general progress of the Society was satisfactory.

Mr. J. Lancaster seconded the motion, which was put from the chair, and carried unanimously.

Mr. Prichard rose and moved the second resolution,

that a vote of thanks be given to the Council and Secretaries. As he had the honour of moving the same resolution last year, he had nothing fresh to say, but merely add that the duties of Secretaries and Councils were very arduous, and it was as little as they could do to give them a vote of thanks. Before he sat down, however, he wished to propose that a vote of thanks should be sent down to Plymouth, to their late Secretary, Mr. Helling, (hear, hear.)

The resolution was put and carried.

Mr. Gillow moved the third resolution, which was seconded by Mr. Beroughs, and carried unanimously,—that the following members form the Council for the ensuing year:—W. J. Church, Jas. Watson, M.D., G. Norman, J. Ormond, R. F. George, J. Soden, R. F. Lindoe, M.D., E. Hodges, M.D., W. F. Bally, W. Davies, M.D., J. S. Bartrum, Bath; H. Fox, M.D., J. C. Swayne, F. H. Morgan, J. B. Estlin, Wm. Kay, M.D., J. A. Symonds, M.D., Wm. Mortimer, H. Clark, T. L. Surragé, W. C. Trotman, M.D., W. Budd, M.D., J. Colthurst, Bristol; F. Flower, Chilcompton; James Crang, Timsbury; George Vicary, Warminster; Arthur Adye, Bradford; W. J. Morgan, M.D., Bradford; Race Godfrey, Yatton Keynall; G. S. Ogilvie, Stapleton; Theodore Davies, Tickenham; Wm. Coates, Wrington; George Allen, St. George's; William Colborne, Chippenham; T. Washbourne, Corsham.

Mr. Flower moved that the Secretaries, Messrs. Bartrum and Colthurst, be re-elected for the ensuing year. He was sure two more fit and capable gentlemen could not be found.

Mr. Surragé seconded the resolution, which was also carried *nem. con.*

Mr. Cox proposed a vote of thanks to the retiring President, Mr. Flower. He did so with very great pleasure, and he was sure that the zeal shown by that gentleman at all times in furtherance of the profession and the Society, his high character both in public and private, and in his profession, rendered it quite unnecessary for him to add one word in furtherance of the resolution.

Dr. Lindoe, of Bath, seconded the motion, and it was carried by acclamation.

Mr. Flower briefly returned thanks.

Mr. Crang, of Timsbury, proposed, and Mr. Godfrey seconded, that Dr. Hodges be appointed President-elect, which was put and carried.

Mr. George moved that the President, the past President, and the Secretaries be appointed a sub-committee to receive subscriptions on behalf of the Benevolent Fund. The resolution, he said, spoke for itself, and therefore he would not trouble them with any observations.

Dr. Rogers seconded the motion, and in doing so urged the claims of the fund upon the consideration of the members of the Association.

Mr. Bartrum then, in a very appropriate speech, moved that this meeting, deeply deploring the loss the Association has sustained in the early and premature death of Dr. Streten, do take this opportunity of expressing their high sense of the zealous and affable manner in which he discharged the arduous duties of Secretary and Editor. This was seconded by Mr. Ruddoch, and also carried.

The ninth resolution was then passed, viz., that this

meeting, deeply imbued with the importance of sustaining the character of the publications of the Association, do express their earnest and anxious hope that every effort should be made to secure an Editor of first rate talent, without confining the selection to the members of any particular city, and that Dr. Budd be requested to attend the meeting at Worcester, for the purpose of enforcing this resolution.

After this some interesting communications were read to the meeting by Messrs. Jennings, of Laycock; A. Prichard, of Bristol; — King, of Bath.

Mr. Ogilvie then rose, and read a letter to the meeting and requested that some few medical gentlemen would do him the favour of appointing a meeting with some friends of his, in order to examine the documents he had obtained since the report of the Chairman of the Gloucester sessions had been read; at which time he had made a similar request to the magistrates then sitting, but which had been refused, relative to the clergyman's son. He said it was evident the intention and disposition of the Chairman of that body, was to crush him, but why and wherefore, he could not say.

The Chairman said he had no doubt if he was to make a personal request to any of the members, they would willingly comply, but thought he did not mean that the Society should interfere in the matter itself.

Mr. Ogilvie acquiesced and the matter dropped.

A vote of thanks having been given to the Chairman, the meeting separated.

About forty of the members and their friends dined together at the Great Western Hotel, at six o'clock, and a very pleasant evening was spent. They were honoured with the presence of that venerable veteran, Dr. Bardsley, of Manchester.

WEST SOMERSET BRANCH MEETING.

The fifth Annual Meeting of this branch was held at Taunton, on Wednesday, the 13th of June, and was very numerously attended. Dr. Burridge presided, in the absence of Dr. Brock.

After the routine business, some reports of interesting cases were read by H. Alford, Esq., F.R.C.S.E.

W. W. Munton, Esq., F.R.C.S.E., Deputy Coroner for the Western Division of Somersetshire, and H. Cotes, Esq., M.R.C.S.E., of Wiveliscombe, were admitted members of the Association.

W. Trevor, Esq., of Dulverton, was elected President of the Branch for the next year, and Bridgewater was proposed as the place of meeting.

The following members form the Council for the current year:—Dr. Burridge, Mr. Gillett, Mr. Bridge, Mr. Hugo, Mr. Plowman, and Mr. Pyne, together with the President, the President-elect, and the Secretary. Dr. Woodforde was re-elected Treasurer and Secretary.

The members afterwards partook of an excellent dinner at Pattison's Castle Hotel.

History of a Case of Pelvic Inflammation, arising from the continuation of a Menstrual Discharge, by J. A. S. Bartrum, Esq.

Section of Pelvic Inflammation, by J. A. S. Bartrum, Esq.

SOUTH-WESTERN BRANCH MEETING.

OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

The Annual Meeting of this Branch was held at the Dispensary, Exeter, on Wednesday, July 18th. Present—Jas. Billett, Esq., Taunton; Thomas Cam, Esq., Seaton; Wm. Gabriel, Esq., Collumpton; John Tucker, Esq., Exeter; Dr. Brent, Woodbury; Wm. Clapp, Esq., Exeter; John Derry, Esq., Totness; Dr. Stephen Hall, Mount Radford; Dr. Pennell, Exeter; Dr. Butter, Plymouth; J. Fuge, Esq., Plymouth; A. Waters, Esq., Exmouth; Jas. Madden, Esq., Heavitree; Dr. Elliott, Exeter; Dr. Miles, Heavitree; Dr. Walker, Esq., Teignmouth; William Williams, Esq., Heavitree; Dr. Massy, Exeter; Dr. Drake, Exeter; William McKenzie, Esq., Edinburgh; F. Hunter, Esq., Torquay; G. Owen, Esq., Sage Dolton; E. P. Pridham, Esq., Exeter; W. Gillard, Esq., Totness; Dr. Toogood, Torquay; Dr. Shapter, Exeter; John Puddicombe, Esq., Dartmouth; John Marker, Esq., London; John Edge, Esq., Exeter; Dr. Scott, Exeter; W. W. James, Esq., Exeter; R. C. Price, Esq., Lymptone; Walter Kendall, Esq., Budleigh Salterton; R. F. Burrough, Esq., Dartmouth; Dr. Black, Torquay; Wm. Woodman, Esq., Exeter; S. S. Perkins, Esq., Exeter; Wm. Collyns, Esq., Kenton; G. Pycroft, Esq., Kenton; Wm. Caird, Esq., Exeter; H. Shaw, Esq., Exeter; P. C. De la Garde, Esq., Exeter; S. Barnes, Esq., Exeter; W. H. Merry, Esq., Broadclyst; E. J. Spry, Esq., Truro; J. S. Perkins, Esq., Exeter; Dr. Nankeville, Torquay; J. H. James, Esq., Exeter.

Letters were received from a great number of members expressing their regret that professional engagements would not allow them to attend the meeting.

Dr. Butter, of Plymouth, the retiring President, took the chair, which, after a short address, he resigned to his successor.

Dr. Pennell then took the chair, and addressed the meeting as follows:—

Gentlemen,—In undertaking the distinguished office to which you have appointed me, I cannot omit expressing my thanks for the honour thus conferred; but at the same time knowing the talent and acquirements necessary adequately to discharge the duties of my present position, I much wish you had selected one more highly qualified.

It is a subject of much satisfaction to remark, that this Association, which has now been established seventeen years, is steadily extending its branches throughout every part of England, and that its members, which include a very large proportion of the talent and respectability of the profession, are to be met with in various parts of Europe and America; and, indeed, it would be remarkable if an Association so constituted, and calculated to promote the best interests of our body,—its dignity,—its learning and independence,—were not cordially esteemed and supported, for I may be permitted to say that the public welfare is much concerned in the attainment of such objects, there being few individuals in this country whose health and happiness are not in a great degree dependent on the professional skill and moral conduct of medical men.

I believe that meetings of this kind are useful in extending our knowledge, and promoting good under-

standing and harmony, by free communication with each other. It is thus that sparks may be elicited by collision of opinion, and at the same time asperities smoothed, and an opportunity afforded of improving our intellectual and moral faculties; they are calculated to abate the too high esteem we are apt to indulge for our acquirements, by contrasting them with those of others, and by friendly intercourse to cherish such principles as are most opposed to selfish and mercenary considerations.

It must be allowed that few societies furnish, for the annual subscription of one guinea, so liberal a return, every member receiving, once a fortnight, a number of the *Journal*, and also a volume of the *Transactions* every year. It is just to say, that the character of the *Journal* has much improved both in quantity and quality, containing a great variety of interesting and instructive medical intelligence. The various essays, retrospective addresses, and cases published in the *Transactions*, are also very valuable, and highly creditable to their authors. And here we must lament the loss we have sustained in the death of Dr. Streeten, who discharged the important office of Secretary to the Society, and conducted its duties with a devotion to its interests which we must all acknowledge and appreciate.

The experience of late years has shown that great advantages have resulted from the adoption of the collegiate system, in providing suitable education for medical students. Inducements are thus held out to the acquirement of habits of diligence, and arrangements are made which promote their comfort and respectability. In the absence of such a system students are left to their own guidance, at a period, and under circumstances when temptations to go wrong are most powerful, and it too often happens that the acquirement of professional knowledge is neglected, and a course of conduct pursued, alike hostile to their happiness, to their position in society as gentlemen, and to their professional advancement in future life.

The numbers of well-instructed young men entering our profession, and also the important investigations which are now carried on in the various branches of science which have intimate and important relations with medicine, are satisfactory proofs that our profession does not remain stationary, but partakes in the general march of improvement.

While considering this subject I cannot refrain from congratulating the profession that public opinion has at length been directed to the necessity of affording suitable instruction to that important class of persons, the nurses for the sick, and that a training institution is now established in London, where they have the means of acquiring all the knowledge necessary for the due discharge of their important duties, and also great care taken that their course of conduct shall be based on sound, moral, and religious principles. When we contemplate the serious consequences which arise from the ignorance, intemperance, and ill conduct of nurses, and the great benefits and blessings which must accrue to the sick from an improvement being made in their character and conduct, we cannot be too grateful that the subject has engaged the attention of many distinguished individuals, who are disposed to promote objects so eminently useful. An old author (Heurnius) in his translation and illustration of the first aphorism of Hippocrates, considers the *res Hippocraticæ* to include *clinice mulieres, pharmacopœi, and chirurgi*, shewing by thus classing them the high importance he attached to their office.

It must be obvious to all that the residence of a class of men of good professional acquirements and general knowledge in the various towns and villages throughout

the length and breadth of this land must have a most beneficial influence on the welfare of the people in every point of view, there being scarcely any subject connected with their sanitary condition which is not associated with such branches of scientific knowledge as are familiar to the great body of medical men.

I will not encroach on your time and patience by any long dissertation on the very unsettled state of Medical Legislation. Her Majesty's Government may well hesitate before they come to any decision, seeing how very divided the profession itself is on almost every branch of the subject. There is, however, one particular of Medical Reform which almost all unite in declaring requires immediate attention. I allude to those over-worked and under-paid officers, the Poor-Law Medical Attendants; the method of remunerating them is highly objectionable, and leads to lamentable results. Why should a plan be pursued in providing medical assistance for the poor which every prudent man cautiously avoids in the management of his own affairs, namely, that of taking the lowest tender? The qualifications and character of the party seeking employment is made an essential consideration, but as respects the most important interests of our poor, those which affect their health, life, and ability to labour for their maintenance, are, in many instances, intrusted to any tyro, who, wishing to supplant an experienced respectable practitioner, and establish himself, will make a tender barely sufficient to provide the necessary drugs. Surely much need not be said to show the iniquity and folly of this mode of providing medical aid for this class of persons. It is clearly bad economy, (which argument may perchance operate where higher principles fail,) inasmuch as complaints are protracted by neglect or unskilful treatment; and in cases of accidents, the unfortunate patients may be maimed for life, a burden to themselves, and also to those whose miserable parsimony has led to such deplorable results. Let the medical man be fairly paid, let due weight be given to moral character and qualification, and it will then be found that the most humane and equitable course is also the most economical. The public are beginning to entertain favourable views with regard to these laborious and ill-paid officers; and it is to be hoped that the Legislature will, ere long, adopt some measure for their relief.

The Benevolent Fund, intended for the assistance of medical men under difficulties arising from sickness or accidents, is one which deserves more general and liberal support than it receives from the profession; this is much to be lamented, we know not how soon those who are most thriving and successful amongst us may be reduced to solicit its assistance.

Many years ago a Benevolent Fund for the relief of medical men was established in this city, and several hundred pounds were accumulated; the amount was invested by trustees in the Funds. The members gradually fell off, either by death or withdrawal, and the existence of the fund was well nigh forgotten, when lately Mr. Collins, of Kenton, awakened attention to the subject, and it was ascertained, on enquiry, that the amount was in the hands of the Commissioners for the reduction of the National Debt; proper measures were taken, and the fund restored, increased by the accumulated interest accruing during many years. New trustees have been appointed, and the society re-established; it is however to be regretted, that it wants the support to which its evident utility entitles it.

It may be expected that I should not pass unnoticed the important investigations which are now carrying on by means of the microscope, in the formation of animal and vegetable bodies, in their healthy and diseased state, from rudimentary cells, and to the influence which they

may have in the treatment of disease. It is enough at present to say that such inquiries tend to enlighten us respecting the minute structure of our frame, a subject of great interest, and which may lead to important results hereafter.

With regard to anæsthetic agents, which at this time occupy much attention, I think they have been too indiscriminately used. It appears to me that their employment is only justifiable in severe and protracted operations, but I cannot bring myself to consider it right, in trifling cases, to fill the delicate air-cells of the lungs, and to expose the innumerable blood-vessels ramifying on their sides to the vapour of either ether or chloroform, producing a change as they do in the composition of the blood, and by its circulation through the brain, affecting the nervous system, in some instances, to a very serious extent.

In considering the subjects of mesmerism, hydropathy, and homoeopathy, as connected with the cure of disease, which in the present day have much engaged the attention of the profession, I shall only observe, that although it is not right hastily to reject new doctrines and opinions because they are different, and; perhaps, opposed to those we are accustomed to entertain, without fair enquiry, yet we are justified and called on to receive these doctrines with great caution, considering the important influence they necessarily have in the treatment of disease. It is desirable that in forming our opinions the greatest diligence should be employed in ascertaining facts before we can safely proceed to establish any principle to which we can refer in medical practice. It is to be apprehended that the temptation to form theories is often too strong to be resisted; facts are not fairly represented, but moulded into such shapes as may best adapt them to support some preconceived, crude, speculative doctrines, and thereby great errors in judgment and practice are entailed.

The information which the use of the stethoscope affords in the diagnosis of disease is now too well known and appreciated to require any comment, but the employment of the speculum in uterine complaints is by no means common. Unquestionably there are obstacles to the use of this instrument arising from the natural scruples of the patient, and the situation of the parts affected, but it is to be feared that females labouring under many anomalous complaints are treated with a variety of remedies for a long period without any benefit, until the skill of the prescriber, and the endurance of the patient, are well nigh exhausted, whilst the diseased state of the uterus, which might have been detected by this instrument, is sometimes the essential cause of all the symptoms which were ill understood; the treatment in such cases must consequently be little better than empirical.

The opinions advanced respecting the non-contagious nature of Asiatic Cholera, by the Sanitary Commissioners, do not appear to me to be founded on sufficient evidence. It is clearly not logical to assume that because a disease affecting large numbers of people often prevails in low situations, where stagnant water and filth of every description abound, that it, therefore, owes its origin to such causes, and that no contagion exists. The question immediately occurs, how is it that they have only produced the disease of late years, when it is evident that they have existed from time immemorial to a much greater extent than they do at present. It seems probable that there are conditions of the atmosphere, independent of these sensible contaminations essential to the action of contagion. Few deny the contagious nature of small pox, yet I have known it appear in its most virulent form in a single house in the

midst of a dense population, and not to have extended beyond its walls. We know at other times, and under apparently the same conditions, it affects large numbers of the neighbouring population. Now these considerations are not simply speculative and of no practical importance, but are entitled to our serious attention, for it is to be apprehended that if the public are led to believe that such kind of nuisances as stagnant water, cess-pools, and other filth, cause the disease, other predisposing causes may be overlooked,—such as cold and poverty, over crowded rooms, and debauchery.

There can be no doubt, that whatever opinions may be entertained on the subject of contagion, that our Quarantine Laws required very considerable modifications, assuming the doctrines of contagion to be admitted.

Perhaps I have now dwelt long enough on these subjects, and shall be expected to give you some account of this city and neighbourhood, but this has been already so frequently done, that I shall limit myself to a very few observations.

The city has been placed in a favourable position by the general adoption of sanitary regulations. It is admirably situated for being thoroughly drained, and, generally speaking, advantage has been taken of this circumstance. It is well supplied with water, taken from the Exe, about two miles from the city. Pumps are here worked, by two wheels of large diameter, and the water conveyed, through iron pipes, to a capacious reservoir behind the gaol; it is from thence freely distributed over the city, by means of machinery. The water may be raised to a still greater elevation. The water, by resting in the reservoir, deposits any foreign substances it may contain, and is fit for domestic purposes.

It would occupy an undue proportion of this address were I to give you even a very general description of the various institutions of this city, and as the information may be readily obtained from other sources, I shall confine myself to giving a brief description of those which have a more immediate professional interest. One of the earliest in date, and most generally useful establishments, is the Devon and Exeter Hospital, which was founded in 1741; it is one of the first provincial hospitals that was built in this country. Considering its date it must be regarded as a very creditable structure. Modern experience, however, may suggest several alterations that would be advantageous, if they could conveniently be made, but an old building of this kind presents numerous and formidable obstacles to modern arrangements. It was originally opened with thirty beds for in-patients; the present number is 200. There are very excellent baths connected with this hospital, which are well arranged for administering the sulphur vapour, and steam baths, in addition to others in common use. A medical library and museum are also connected with the hospital. The latter mainly owes its origin and present state to the activity and zeal of Mr. James, one of our Senior Hospital Surgeons.

The Exeter Dispensary, (the building in which we are now assembled,) was erected about nine years since, at a cost, including its site, of about two thousand five hundred pounds; it is admirably adapted for its object of affording advice and medicine to the suffering and industrious poor, particularly to those labouring under contagious diseases. Its limits include the city and county of Exeter within the turnpike gates. The number of patients admitted during the last year was 2564, of whom 1402 were cured, and 733 received benefit. The total number admitted since the opening of the Institution is 45,292. The library consists upwards of 400 volumes; and the periodical publications are received. A museum is also connected with this institution, and

contains some interesting preparations. Through the zeal and activity of Dr. Shapter, a Pathological Society has been formed, and holds its meetings in this room.

The Eye Infirmary is situated in Magdalen Street; it was opened in 1808. The total number of patients admitted since that period is 26,321, of whom 25,256 were cured, and 1531 benefited. It is supported by benefactions, legacies, and annual subscriptions. There are also the Lying-in Charity and Humane Society; the latter opened in 1790, for restoring suspended animation to those apparently dead by suffocation and drowning.

I shall now conclude with again expressing my thanks to you for the distinction shewn me by calling me to preside on this occasion, and assuring you that I take a lively interest in the prosperity of this Association, being highly conducive, as I sincerely believe, to promote the respectability, learning, and acknowledged utility of our noble profession.

The following resolutions were then agreed to:—

Proposed by Dr. Toogood, of Torquay, and seconded by G. Owen, Esq., of Dolton, "That the next annual meeting be held at Dartmouth."

Proposed by J. Fuge, Esq., of Plymouth, and seconded by Allan Waters, Esq., of Exmouth, "That R. F. Burrough, Esq., of Dartmouth, be the President-Elect."

Proposed by E. P. Pridham, Esq., of Exeter, and seconded by Dr. Elliot, of Mount Radford, "That Dr. Kingdon be re-elected Secretary."

Proposed by T. Hunter, Esq., of Torquay, and seconded by John Edye, Esq., of Exeter,—"That John Elliott, Esq., Kingsbridge; F. J. Gillard, Esq., Newton; J. Pudicombe, Esq., Dartmouth; T. N. Elliott, Esq., Dartmouth; and Baruch Toogood, M.D., Torquay, be the new members of the Council, in the room of those who retire according to rule 5, viz., F. Mackenzie, Esq., Tiverton; John Spettigue, Esq., Exmouth; Edwin Empson, Esq., Crediton; Edward Lanyon, Esq., Camborne; and John Ward, Esq., Bodmin."

Upon the motion of Dr. Toogood, of Torquay, seconded by Dr. Butter, of Plymouth, it was resolved unanimously,—

"That this meeting views with great alarm the frequent and increasing recurrence of the crime of secret poisoning, by which whole families have lately been destroyed.

"That it is the opinion of this meeting that some legislative restriction is necessary to prevent the indiscriminate sale of poisons, and more especially of arsenic, which is so readily obtained, and easily administered; and that it would be a means of lessening the frequency, if not of preventing altogether, such atrocious crimes, alike disgraceful to the country and age we live in.

"That it is desirable that a Committee should be appointed at the ensuing anniversary meeting of the Provincial Medical and Surgical Association, at Worcester, to prepare a Bill to effect this most desirable object, and that petitions should be presented to both Houses of Parliament, praying that it may be passed into a law.

"That the members of the South-Western Branch of the Association pledge themselves individually to use their best exertions and Parliamentary influence, to carry these resolutions into effect.

COMMUNICATIONS.

Edward J. Spry, Esq., of Truro, communicated a "Case of Horny Ecrexence of the Penis, cured by the application of Sesquichloride of Antimony."

Also a "Case of Partial Dislocation of the Cervical Vertebrae, with Fracture of the Os Hyoides."

A paper also, "On the Balsam of Peru as an application to Indolent Ulcers."

These cases will be published in a future number of the Journal.

E. P. Pridham, Esq., of Exeter, communicated a "Case of Aneurism of the Arch of the Aorta, compressing the recurrent nerves, producing symptoms of chronic bronchitis, and eventually death by spasm of the larynx."

William Collins, Esq., of Kenton, exhibited a woman with a tumour situated in the back, of twenty-five years' growth; measuring twenty-four inches round the base, thirty-six inches in circumference, twenty inches long, and nineteen inches wide.

Mr. Collins also related a "Case of a small pebble passing into the trachea, and expelled after a period of nearly three months, with recovery."

Many other interesting cases were related, and at five o'clock between forty and fifty members dined together at the London Inn; Dr. Pennell occupying the chair, and Mr. De la Garde acting as Vice-President. The evening terminated in a very pleasant soiree at Dr. Shapter's.

ON THE PRACTICE OF DISPENSING MEDICINE.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

It may very necessarily be asked, to whom shall we look for reform in the abuses of medicine; and what has already been done? But, alas! it is to this Society I would now, in an especial manner, appeal, which is shortly about to commemorate its seventeenth anniversary and ask what has been done by it in this all-important matter, whilst it is peculiarly called upon, by the fifth object set forth, "To maintain the honour and respectability of the profession."

In a vulgar, but not inapt, figure, instead of beating about the bush, and being satisfied by mere innuendos, or occasionally echoing the voice of an individual on this subject, let us at once lay hold of the bull by the horns, and cause it to be brought prominently before the Society on the 1st and 2nd of next month, for full and free discussion of its members, and be put to vote; then we shall see who are, and who are not, in favour of medicine being legally dispensed, because I, for my part, cannot think anything is done, comparatively speaking, till this abuse,—this most awful and fatal abuse, so much involving both the welfare of the public, and the integrity of the profession, is redressed. It is deadly to the people, most disgraceful to the profession, and reduces a man of education to the level of the illiterate and uninformed, giving also an opportunity to the latter of amassing, in very many instances, a handsome independency, and enabling him

thereby to appear as a gentleman,—mind, only externally, while it reduces the former, not infrequently, I am truly sorry to see, to penury, starvation, and mendicity. This, indeed, is a very hard saying, but, my fellow brethren, my appeal is to all. Is it not too true?

It is now high time that the more providentially fortunate of the profession should endeavour to relieve themselves of the stigma by foregoing all selfishness, and forwarding, instead of obstructing and directly oppressing, the more unfortunate, whose voices, though not so circumstantially loud, should, nevertheless, be heard; and from their rank and position as educated men, and members in communion with themselves, an audience they have a right to demand; and until this Society labours effectually to better the situation of its poorer members, it should incessantly cry out and legitimately enforce their rights, by exposing all those who would in any way dispossess them of them. Indifference and apathy on the part of our more influential members to the general prosperity of the whole body is a glaring and characteristic feature of the present time. Now, Mr. Editor, I have but too feebly endeavoured to portray and set forth one of the grossest abuses of the profession, and one to which I would particularly call your attention, trusting that you will deal with it as the merits of the case demands.

I am, Sir, yours very truly,

A MEMBER OF THE PROFESSION.

July 17, 1849.

Medical Intelligence.

SUCCESSFUL CASE OF CESAREAN OPERATION.

At the Lancashire and Cheshire Branch Meeting of the Provincial Medical and Surgical Association, Dr. Radford, briefly announced the occurrence of a second successful case of Cesarean operation in his practice; and that both mother and child were then, (seven weeks after the operation,) doing well. The woman had previously given birth to three children in the natural way, but had, since the birth of the third, incurred great deformity of the pelvis through malacosteon. Fuller details of the case Dr. Radford wished to reserve till the Worcester meeting.

UNIVERSITY COLLEGE, LONDON.

The resignation of Dr. C. J. B. Williams, late Professor of the Practice of Physic, has given rise to two or three changes in the medical staff of this Institution. Dr. Golding Bird, Dr. Sibson, and Dr. Walshe, were candidates for the Chair of Medicine. Dr. Walshe was elected to that distinguished appointment, which rendered it necessary that this gentleman should vacate the Chair of Pathological Anatomy, which he had some years ago filled, since the death of the late Professor Carswell, a name which, in this department of medical science, is deservedly ranked with those of Andral, Vogel, and Rokitański. It is said that Dr. Carswell, a short time previous to his death, strongly recommended the Patrons and Committee of the University, to elect to his place Dr. Walshe, and time has shown

that this recommendation was a most felicitous one. The present candidates for the Professorship of Pathological Anatomy, are Dr. Beck, the correspondent with Dr. Lee "On the Nerves of the Uterus," and for which that gentleman received the Royal Society's gold medal, Dr. Jenner, and Dr. J. R. Wardell. Dr. Parkes it is understood was a candidate also, but as that gentleman has been appointed to the Chair of Clinical Medicine, the matter now, of course, remains with the three above mentioned. The lamented death of Dr. Anthony Todd Thompson has given rise to another vacancy, the Chair of Materia Medica,—and Dr. Parkes resigns his post of Assistant Physician, thereby necessitating another appointment.

[From the numerous and valuable papers contributed by Dr. Wardell to our columns, we have had every opportunity of judging of his industry and talents, and we heartily wish him success; more especially as from the flattering nature of his testimonials, and the opportunities which he has enjoyed for the prosecution of the study of pathological anatomy, we are thoroughly assured of his competency to fill the chair for which he is competing.—ED. JOURN.]

APPOINTMENTS.

On the 27th of June Mr. Frederick Mason was elected to the office of Surgeon to the Western Dispensary of Bath.

Professor Owen has just received the Diploma conferring on him the distinction of Corresponding Member of the Royal Academy of Sciences of Madrid, and has been unanimously elected an Honorary Fellow of the Royal College of Surgeons of Ireland.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, July 6th, 1849:—E. Batwell; H. Cuolahan; H. Welsh; W. M. Sedgwick; S. H. Hobart; W. Prowse; W. Gerrard; R. J. Stevens; G. Evans; G. Peacocke; C. France.

Gentlemen admitted Members on Friday, July 13th, 1849:—H. J. Phillips; T. Ellis; W. T. Bassett; G. King; Said Assaid (a Syrian); C. J. Morris; G. B. Turner; W. Squire; G. Hodson; W. H. Manifold; G. A. K. Lake; C. H. Linnock; H. W. Hughes.

Gentlemen admitted on Monday, July 16th, 1849:—J. A. Morris; J. E. Crook; G. H. Lovegrove; T. A. Finnimore; W. J. Moore; W. Bradley; J. W. King; F. Le Keux; P. W. Govett.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Members on Thursday, July 12th, 1849:—William Byron Hill, Exeter, Devon; Daniel Meadows, Winesham, Suffolk; Alfred Wm. Moore; Robert Delafosse Shield, Clun, Salop.

OBITUARY.

Died, July 6th, aged 90, John Shadwell, Esq., M.D., Lord of the Manor of Horfield, near Bristol,

July 10th, in Albemarle Street, London, in the 67th year of his age, Sir William Hyde Pearson, M.D.

July 12th, of rapid consumption, Mr. Maurice Dyte, surgeon, of 44, Houndsditch, London, in the 43rd year of his age.

July 13th, in the 33rd year of his age, Frederick Harding Lerew, Esq., surgeon, at the residence of his brother, 54, Portman Place, Maida Hill.

BOOKS RECEIVED.

Practical Remarks on Dysmenorrhœa, and its Treatment by Caustic to, and Dilatation of, the Uterine Neck. By S. Edwards, M.D. London: Saville and Edwards. 1849. 8vo pp. 20.

The Three Kinds of Cod-Liver Oil, comparatively considered with reference to their Chemical and Therapeutical Properties. By L. J. De Jongh, M.D., of the Hague. (Translated from the German, by E. Carey, M.D., London.) London: Taylor, Walton, and Maberley. 1849. 8vo pp. 176.

An Enquiry into the Bearing of the Earliest Cases of Cholera, which occurred in London during the Present Epidemic, on the Strict Theory of Contagion. (From No. VII of the *British and Foreign Medico-Chirurgical Review*.) By Edmund A. Parkes, M.D., Assistant Physician to University College Hospital. London: C. and J. Adlard. 1849. 8vo pp. 28.

On the Extraction of Teeth: with an Account of a New and much Less Painful Mode of Operating. By Henry Gilbert, M.R.C.S.L., and Surgeon-Dentist; Fellow of the Royal Medico-Botanical Society of London; of the Provincial Medical and Surgical Association, &c. &c. &c. London: Renshaw. 1849. 8vo pp. 66.

A Remonstrance with the Lord Chief Baron touching the case Nottidge *versus* Ripley. By John Conolly, M.D., Fellow of the Royal College of Physicians of London, and Physician to the Middlesex Lunatic Asylum at Hanwell. London: Churchill. 1849. 8vo pp. 16.

Fruits and Farinacea the Proper Food of Man; being an Attempt to Prove, from History, Anatomy, Physiology, and Chemistry, that the Original, Natural, and Best Diet of Man is derived from the Vegetable Kingdom. By John Smith. Second Edition. London: Churchill. 1849. Fcap. 8vo pp. 342.

TO CORRESPONDENTS.

Communications have been received from Mr. Prichard, Mr. Hey, Justitia, Birmingham Pathological Society, Dr. Star, Mr. Morgan, Mr. Spry, and Mr. Horsell.

The insertion of the remainder of the papers read at the Suffolk Branch Meeting is again unavoidably postponed, owing to the space occupied by the accounts of the Yorkshire, South-Eastern, Bath and Bristol, and South-Western Branch Meetings.

In consequence of the lamented death of Dr. Streeten, it is requested that all letters and communications be sent to J. H. Walsh, Esq., Foregate Street, Worcester. Parcels and books for review may be addressed to the care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

PROVINCIAL MEDICAL & SURGICAL ASSOCIATION.

ANNIVERSARY MEETING.

The Seventeenth Anniversary Meeting of the Association was held at Worcester, on Wednesday, the 1st, and Thursday, the 2nd of August, 1849.

The following gentlemen recorded their names in the book kept for that purpose:—

James Tunstall, M.D., Bath; Milton John Taylor, Esq., Bath; Charles Hastings, M.D., Worcester; Robert Wake, M.D., Southwold; Wm. A. Greenhill, M.D., Oxford; Thomas Martin, Esq., Reigate; J. H. Fuge, Esq., Plymouth; J. Stedman, Esq., Guildford; W. J. Church, Esq., Bath; J. S. Bartrum, Esq., Bath; W. Conolly, M.D., Cheltenham; J. Conolly, M.D., Hanwell; Thomas Radford, M.D., Manchester; John S. Soden, Esq., Sunbury; John Crang, Esq., Tinsbury; Farnham Flower, Esq., Chilcompton; Geo. Norman, Esq., Bath; Richard Flint, Esq., Stockport; Edmund Lyon, M.D., Manchester; Francis Henry Woodforde, M.D., Taunton; A. Robertson, M.D., Northampton; James Heygate, M.D., Derby; Richard Hill, Esq., Worcester; John Forbes, M.D., London; J. Malden, M.D., Worcester; H. D. Carden, Esq., Worcester; P. H. Williams, M.D., Worcester; M. Pierpoint, Esq., Worcester; James P. Sheppard, Esq., Worcester; W. Lambert, Esq., Thirsk; John Kirkman, M.D., Melton, Suffolk; Charles Lingen, M.D., Hereford; Joseph Toynbee, Esq., London; Charles Potheary, Esq., Manslow; R. G. Mayne, Esq., Leeds; John Rose Cormack, Esq., Putney, London; John Snow, M.D., London; Joseph Hickman, Esq., Brockton; R. Woodhouse, M.D., Reading; John Hatton, Esq., Manchester; Graham Niven, Esq., Pershore; S. Hare, Esq., London; J. L. Hobbes, Esq., Bellbroughton; W. Newnham, Esq., Farnham; Sherwin Coates, Esq., Malvern; William Todd White, Esq., Kempsey; J. D. Jeffrey, Esq., late of Southwark; James Gates, Esq., Wolverhampton; J. Topham, M.D., Wolverhampton; David Rice, Esq., Stratford-on-Avon; Henry G. Bull, M.D., Hereford; Piploe Cartwright, Esq., Oswestry; G. W. Jotham, Esq., Kidderminster; R. W. Lindoe, M.D., Bath; W. Cooksey, Esq., Worcester; Thomas Paget, Esq., Leicester; Walter Jones, Esq., Worcester; Anthony Martin, Esq., Evesham; George Edwards, Esq., Wolverhampton; Richard Griffiths, Esq., Wor-

cester; Fras. Davies, Esq., Pershore; John Churchill, Esq., London; David Everitt, Esq., Worcester; Chas. Cowan, M.D., Reading; Thomas Workman, Esq., Reading; Francis Sibson, M.D., London; John Claridge, Esq., Pershore; Henry Thomas Lomax, Esq., Stafford; E. W. Howey, Esq., Bromyard; Josh. Meears, Esq., Worcester; P. Marriott, Esq., Bath; Samuel Berry, Esq., Birmingham; Bell Fletcher, Esq., Birmingham; Joseph Wickenden, Esq., Birmingham; James Johnstone, M.D., Birmingham; Samuel Barnett, Esq., Ombersley; John Pemberton, Esq., Droitwich; George Burrows, M.D., London; C. Radclyffe Hall, Esq., Holmes Chapel; Samuel Crompton, Esq., Manchester; Charles W. Bell, M.D., Manchester; W. Welton, Esq., Bayton; C. F. J. Lord, Hampstead; Thomas Thursfield, Esq., Kidderminster; Thomas Hunt, Esq., 21, Bedford Square, London; Charles Bailey, Esq., Chippenham; W. H. Colborne, Esq., Chippenham; Richard L. Pennell, M.D., Exeter; William Mortimer, Esq., Clifton; Professor Knowles, Birmingham; James Paget, Esq., London; E. Haward, M.D., Newport; Arthur Stilwell, M.D., Hillingdon; John Kilvert, Esq., Bath; J. H. Walsh, Esq., Worcester; Thomas Macauley, Esq., Leicester; James Black, M.D., Bolton; W. Cantrell, Esq., Wirs-worth; James Paxton, M.D., Rugby; John Smith Gaunt, Esq., Alrechurch; Thos. Barnes, M.D., Carlisle; T. Spencer Wells, Royal Navy; W. Dalton, Cheltenham; Francis Wright, M.D., Market Harborough; Edmund Hodges, M.D., Bath; James Robertson, Esq., Worcester; William J. Little, M.D., London; James Edwards, M.D., Chester; Thomas Smith, M.D., Cheltenham; J. J. Field, M.D., Torquay; Henry Morris, Esq., Studley; D. C. Noel, Esq., Worcester; J. Coker Davies, Esq., Worcester; Edw. Oke Spooner, Esq., Blandford; Thos. Fawsitt, Esq., Oldham; Joseph Jones, Esq., Severn Stoke; Thomas Beale Cooper, M.D., Bengeworth; J. B. Haynes, Esq., Evesham; Oswald New, Esq., Evesham; J. H. Porter, Esq., Bengeworth; Herbert W. Budd, Worcester; James Allardyce, M.D., Cheltenham; J. Abercrombie, M.D., Cheltenham; Hilary Hill, Esq., Worcester; George Wyman, Esq., Alcester; Christopher Royston, Esq., Redditch; Francis C. F. Malden, Esq., Worcester; Charles Joseph Fox, Brislington; Wm. C. West, Esq., Great Malvern; W. H. Ricketts, Esq., Hill Court; James Nash, M.D., Worcester; Theodore S. Tearne, Esq., Worcester; T. W. Walsh, Esq., Worcester; H. L. Smith, Esq., Southam, &c. &c.

A preliminary meeting of the Council took place at eleven o'clock in the morning, and the

FIRST GENERAL MEETING

was held at the Natural History Rooms, Foregate Street, at one o'clock.

M. PIERPOINT, Esq., having moved that GEORGE NORMAN, Esq., of Bath, take the chair, that gentleman proceeded to address the meeting as follows:—

GENTLEMEN,—The only duty that remains to me as President of your Association, is to surrender my post to Dr. Hastings, who was elected at the last Anniversary Meeting, held in Bath, but in doing so I should be deficient in my duty to you if I did not most cordially thank you all for the kind attention shown to me as President, more particularly at the last Annual Meeting. The attention and kindness I have received from the members of the Association, and the indulgence they showed me at the many imperfections of that meeting, arising from the short notice I had, compel me to express my gratitude for your very particular kindness on that occasion. I should also be wanting in my duty to my own profession, as a body, if I did not express to them the cordial co-operation and assistance which I have realized at their hands, and without which it would have been impossible for the meeting to have gone on. I would also further express my satisfaction, and I am sure the satisfaction of every member of the Association, that we are met again in the city in which it had its birth, and under the presidency of a gentleman through whose energy and zeal it first had its existence, and by whose assistance it has gone on prosperously to the present period. (Applause.) The Association has now made a revolution of seventeen years around the light that gave it birth. It may not be probable that we shall all live to see it come round to that period again, but I devoutly hope and believe that it will make another revolution of seventeen years, and will have acquired that strength, importance, and utility, which its first founder fondly hoped and believed it would attain, and which there is every rational ground for believing; and I trust that when that revolution shall have been made, it will find our founder in health and vigour, capable of presiding over us once more. (Great applause.) I have again to thank you personally for the attention that I have received at all times from the members of the Association, and I will conclude by wishing you all success, health, and happiness. Mr. Norman resumed his seat amidst the applause of the meeting.

Dr. HASTINGS then took the chair, and was greeted with great applause, which lasted for several minutes; he then proceeded to deliver the following address:—

FRIENDS AND FELLOW MEMBERS,—The elevated position in which your kindness has placed me, is calculated to awaken considerable apprehensions as to my capability of fulfilling its responsibilities. I have so high an opinion of the great trust you have reposed in me, and by long experience so just a diffidence in my abilities to fill it in a manner adequate even to my own ideas, that I should never have intruded into so high a situation, if I had not felt sure that I was acting in accordance with your wishes, and that I should be

supported in my office by the same kindness and consideration that have ever marked the bearing of the members of this Association to their President.

It is now seventeen years since, in this very city, it fell to my lot to propose a plan upon which an Association might be formed, having for its object the advancement of medical science, and the elevation of the character of the cultivators of the art of medicine resident in the provinces. On that occasion, when I addressed a numerous meeting of the profession in the board-room of the Worcester Infirmary, I was induced to say:—"When I see assembled around me some of the brightest ornaments of our profession, and when I call to mind the fact, that in addition to those now present, our Association already numbers among its future members, a large proportion of physicians and surgeons who are, and have been zealous and successful cultivators of our science; whose wishes, moreover, for the success of the Association are ardent and strong; and who are only detained by paramount necessity from being here this day, to express their conviction that such an Association as we are now about to form, is not only desirable but loudly called for. When, gentlemen, I contemplate these promising omens, can I for one moment doubt the success of the enterprise? Can I for an instant cease to devote my poor abilities to advance the progress of the good cause in which we are engaged?"

Now, these glowing anticipations have been fully realized by the result of the last seventeen years; or rather, I should say, that the success which has attended our endeavours to combine and consolidate the energies of the provincial profession, has surpassed the expectations then formed of the probable progress of the Association. Instead of being, as then, a comparatively small body, you have increased nearly twenty-fold, and there are now enrolled as members of the Society a considerable proportion of the whole medical profession of this country.

Among the many advantages arising from the organization of the Society, it has always struck me that the scientific and social benefits resulting from these happy annual meetings are the foremost. The opportunities are so few, in the short life of a medical practitioner, of coming into personal communication with his fellow labourers in the art of medicine, who do not happen to be residing in the same locality as himself, that any gathering of the kind that we shall witness for these two days, must be an object of great interest. Within the last seventeen years how much pleasure have I enjoyed from meeting at these re-unions many cultivators of our science, with whom I should otherwise have had no personal communication. And how many tender and happy recollections have been recalled, by again having intercourse with those who, in earlier years, were the companions of my studies, and shared with me the gratification I experienced in Modern Athens, and more especially from the spirited discussions we attended at the Royal Medical Society. Further, who can yet say how much good has resulted, or may result, at these gatherings, from eye beaming on eye, and voice answering to voice? Thus our finer and better feelings are attuned to high deeds, and generous emotions; and the sorrows of those of our brethren who have been less fortunate than ourselves, cannot fail to affect us, and we are induced to give of our abundance to mitigate their sorrows.

“Quanto quisque sibi plura negaverit.
A Diis plura feret.”

These favourable results are so present to my mind, that I cannot avoid reverting to them now, when after a series of years you re-visit the birth-place of the Association; for all these things burst upon my mind, and tend to heighten the delight which I experience in cordially welcoming you to this ancient and interesting city, where you will be received with all the honour which my medical brethren at Worcester so well know how to bestow.

If we seek for further testimony to the beneficial results of the Association, we may find it in the investigations in which the members of the Society have been engaged, and of which our published *Transactions* and *Journal* are a fair monument; for our publications contain proof that all the subjects originally proposed for investigation have received some attention, and that a harvest more or less abundant has been reaped. Doubtless there is mixed with these feelings of congratulation some degree of disappointment that we have not realized any great or important discovery,—that we have not, like Newton, established some great principle which can regulate our inquiries into vital phenomena, and render the art of medicine more perfect; but in the absence of such remarkable discoveries, and until the light of truth illumines our path more brilliantly, we must be content to be humble investigators of nature, and assiduously collect and arrange facts and phenomena. There is one department of inquiry originally proposed, in which we appear to have been less successful than in some others, the collection of reports from provincial hospitals; but I am glad to observe, that within the year that has passed, the *Journal* has been enriched by several valuable communications of this kind.

I must also note as deficient, the inquiries into the medical topography of England. There are, no doubt, to be found in our *Transactions* many valuable essays on this subject, but there are localities where members of the Association are resident, concerning which many interesting particulars, as to soil and climate, manners and customs of the inhabitants, state of public health, and other particulars, might be collected. On these points especially provincial practitioners have the means of gathering contributions, and thus of supplying a more perfect system of vital statistics than we at present possess.

The question of medical legislation has assumed an importance, since this Association was called into existence, previously unknown, and we have been engaged in laying deeply and broadly the foundations on which it must ultimately rest.

In my Address at the formation of this Society, I observed,—“It is admitted on all hands, that the organization of the profession is not what it ought to be, for the whole system of medical polity in this country is both defective and erroneous. Opinions differ widely as to the evils and remedies, but few are found to commend the existing order of things. This subject is closely connected with the advancement of medical science, for if the profession were constituted as it ought to be; and as reason and sound principle dictate, the harmony that would be thus established among the several departments could not fail to prove a direct means of their co-operating more cordially

and efficiently in extending the science, and improving the practice.”

At that time it was my good fortune to enjoy the friendship of one who had thought deeply on medical ethics, and to whom the history of the alterations which had been slowly going on in medical polity were familiar, and who was also keenly alive to the incongruities that had arisen from the defective organization of the profession. Fortunately for the onward progress of this Association, that eminent individual actively co-operated in modelling the yet unformed constitution of this Society, and more especially in assisting our early deliberations on the course to be taken on the growingly-important question of medical reform. Need I utter the name of Barlow? Is it not present to you all?—a name never to be mentioned in this assembly but with the greatest respect. Feelings of sorrow are at this moment mingled with our joy, when we reflect that he and others are departed, and their voices will be no more heard among us! And here we must especially deplore the very severe loss the Association has this year sustained, in the sudden and unexpected death of our late inestimable Secretary, and my much valued friend; but the occurrence is too recent, and the circumstances too afflicting to permit me to dwell upon them,—

“Pallida mors—æquo pulsat pede

Pauperum tabernas—regumque tures.”

I was just saying that Dr. Barlow had given profound attention to the question of medical legislation, and under his guidance chiefly, certain fundamental conclusions were arrived at, after much pains and labour, which we conceive must be the basis of any enlarged measure of medical legislation. They are enunciated in three short propositions.

1st. Uniformity of primary qualification.

2nd. Equal right to practise throughout Her Majesty's dominions.

3rd. The adoption of the representative system in the formation of the councils or governing bodies.

These are the principles for which we are now contending, and with every prospect of ultimate success. Circumstances have arisen to delay the final settlement; but the good day must come. It would indeed have been in the highest degree gratifying to me at this time to announce the final settlement of this intricate question; but there are still difficulties to surmount, and asperities to soften.

In fact it must be recollected, that in the construction of the future medical edifice, old materials must be employed; and it is evident that it is an easier task for an architect to construct an entirely new building than to re-construct and adorn an old one.

There is, perhaps, no point of view in which the defects of our medical polity are more apparent, than in considering the medical attendance on the sick-poor. The law provides, that during sickness the poor shall have medical attendance; yet the authorities constituted to carry out that benevolent intention have, in many instances, by their hard dealings with the medical attendants under the Poor-Law, gone far to deprive the sick-poor of the necessary succour, and but for the generous devotion of the profession to their arduous duties, irrespective of pecuniary considerations, this must have been the case. Happily the intervention of this Association, and other influential

bodies, has in a degree mitigated these crying evils, and we see the dawn of better things.

It is evident, therefore, that in the absence of a more perfect state of organization of the medical profession, it is highly important that the members of this Society should consider it their bounden duty to devote their best energies to the advancement of the divine art which they cultivate; and we must remember, that one of the special objects of our meeting is to maintain the honour and respectability of the profession in the provinces, by promoting friendly intercourse and free communication of its members; and to establish among them the harmony and good feeling which ought ever to characterize a liberal profession. And was there ever a time in the history of medicine, when such aid was more needed? Do not pernicious medical heresies now prevail, and is not empiricism rampant? Do we not find among those who have been educated in the most approved principles of our noble profession, and from whom better things might have been expected, some few whose selfish and sordid views tend to throw discredit on our art, and to sap the very foundations on which the fabric of our science rests? Can we, without pain, observe the spirit of misrule and confusion which prevails, or witness without a sigh the attempts that are made to bring about feelings of hostility between the cultivators of the several branches of medical practice?

For all these evils the influence of this Association must be potent, if we do but sedulously carry out those principles of medical ethics, which exist in every well-governed mind, and are identical in all circumstances, however variously they may be applied.

There is another view which may be taken of these annual meetings, and in which they will be seen to be productive of good. In every locality we visit, the medical and scientific institutions that are there subservient to the relief of disease, and to the advancement of medical and general knowledge, are brought prominently before us, and we derive advantage and pleasure from comparing with each other, the various attempts that are everywhere being made to realize all the benefits that can possibly be derived from these philanthropic establishments.

In Worcester, the medical institutions are the Worcester General Infirmary, the Worcester Dispensary, and the Worcester Ophthalmic Institution.

The Worcester Infirmary was one of the first establishments of the kind which the philanthropy of the last century founded in the English provinces. It was commenced in the year 1745, at a time when the kingdom was distracted by civil war, and from very small beginnings has gradually become a noble charity, and is almost yearly experiencing additions and improvements. The building is not altogether so well arranged as some of the more modern edifices of this kind, but the wards are spacious and well ventilated. The charity is open to the poor of any country, and accommodates one hundred patients. This Institution is highly creditable to the liberality of the city and county that supports it. Its management is vested in certain governors; all who subscribe one guinea per annum being of the number. The Governors will be gratified by your inspection of its entire management, and thankful for any suggestions you may make for its amendment.

The Dispensary and the Ophthalmic Institution are charities of much more recent origin, but they are both instrumental in affording seasonable relief to the sick-poor of this city and the surrounding district.

There are several valuable institutions in Worcester dedicated to the advancement of knowledge, but I should detain you too long if I were further to allude to them, excepting to the Worcestershire Natural History Society, which, as being most intimately connected with medical science, I shall venture to enlarge upon.

In the edifice of that Society we this day assemble. This handsome structure having been erected at a cost of more than £5000 since the last gathering of the members of the Association at Worcester. I may remark, that the origin of the Society may be very much attributed to the recommendation of our distinguished Associate, Dr. Conolly, who, in the first volume of the *Transactions*, published "A proposal to establish County Natural History Societies, for ascertaining the circumstances, in all localities, which are productive of disease or conducive to health." In the course of that excellent paper Dr. Conolly remarks:—"Out of the County Natural History Societies could scarcely fail to arise one more advantage which did not enter into my first consideration of them. The gradual concentration in County Museums of a great part of the valuable collections already made by scientific individuals, or which would naturally be made in the course of the particular labours of several of the sections. The difficulty which individuals find in becoming even tolerably well acquainted with the geology, botany, and natural history of their own country, would thus in a great measure be removed; its products and manufactures would become familiar to every eye, and its history and antiquities to every mind. A tour through the provinces of England and Scotland might then become a tour of science, as well as of pleasure, and the peculiarities of our island displayed in numerous scientific collections, would attract distant, and even foreign, visitors, whilst they would form so many lessons for young persons of our own nation, who are generally very ignorant of everything relating to the country of their birth."

I think, gentlemen, when you have inspected the collection of curiosities contained in this edifice, you will be of opinion that the city and county of Worcester have admirably carried out the recommendations of Dr. Conolly, and that the museum is very rich in specimens, considering the short period the Society has existed.

In conclusion, let me give expression to the great joy with which I hail this day—*O diem letum notandumque mihi candidissimo calculo!*—the day that this Association re-visits Worcester, once the capital of an ancient kingdom, but still more closely linked to us as the centre of our flourishing Society. Let me also assure you, that in anything which concerns the cause of science, and the interests of humanity, you may command my humble services, and that I highly value this Association, for I there witness the triumph of the social principle, and the subjection of all low, paltry, and selfish interests to the interests of man. I earnestly recommend you all to cherish this social principle; it is the principle which promotes peace; it is the principle of true honor; it is the principle of the Christian religion.

J. P. SHEPPARD, Esq., then read the

REPORT OF THE COUNCIL.

In presenting the Seventeenth Annual Report of the proceedings of this Association, the Council cannot but congratulate the Members on again meeting at Worcester, where, seventeen years ago, the Society was formed, under highly favourable circumstances. Since that time the Association has spread its branches over every part of England, and Members are connected with the Association not only in most of the European but also in the American States; and it is gratifying to reflect that from the institution of this Society to this time it has steadily advanced in importance, in influence, and usefulness. On each recurring Anniversary there has been abundant cause for concluding that much benefit has resulted from the steady pursuit of the objects for which the Society was formed; and your Council are of opinion that past experience has shown that its original constitution was a good one, and has fully answered the purposes it was intended to serve.

The Council have, in common with the Society at large, to deplore the loss they have sustained in the death of their late Secretary, Dr. Streeten, who, for six years had conducted the business of the Association, and had devoted himself to its interests in so praiseworthy a manner, that it will be long ere his labours can be forgotten. Your Council feel it due to his memory to record in this Report the resolution touching this said event, which the Worcester Council unanimously agreed to at their first meeting subsequent to his decease.

Resolved unanimously—

“That this Council, deeply impressed with the serious loss which this Association and the Profession at large have experienced in the death of their lamented Associate, Secretary, and Editor of the Publications, Dr. Streeten, do take the earliest opportunity afforded them to record their high sense of his merit, and their deep regret that the Association should be deprived of his able, indefatigable, and zealous services, at a period of his life which gave promise of many years of usefulness; and this Council would not do justice to their own feelings, nor to his inestimable worth, if they did not testify their belief that much of the success which has marked the progress of the Society has arisen from the persevering energy and urbane deportment to the members manifested by him in carrying on the affairs of the Association.”

Several others of your Associates have since the last Anniversary been removed by death, and thus, as might be anticipated in so numerous a body, the numbers are being continually diminished; yet the acquisition of new members has fully supplied this loss, and the number on the list is now about 1760

FINANCE.

	£	s.	d.
Balance in hand	18	0	4½
Receipts... ..	1699	19	11½
	1718	0	4
Expenditure	1701	17	10
Balance	16	2	6

The general statement of receipts and expenditure will be laid before you more particularly than can be done in this report, but the Council feel it right to advert to the great benefits which this Association confers on every member through the medium of its publications. In fact the Council believe it is undeniable that

the Association is in this respect more liberal to its Members than any society of a similar nature. At the present time, in return for an annual subscription of one guinea, every associate receives once a fortnight a copy of the *Provincial Journal*, and since the last Anniversary Meeting, Parts 1 and 2, making the Sixteenth volume of the *Transactions*, have been published, and a copy has been sent to every member whose subscription is paid.

These great advantages your Council submit can only be continued by a punctual payment of the subscriptions, and they hope that every member will feel called upon to do his duty in this respect.

Your Council recommend, that whosoever may be elected Secretary at this Anniversary, be requested to act fully up to the laws, which have been framed for the purpose of depriving those members, who are in arrear, of the publications of the Society, and that the number of copies of the *Journal* and of the *Transactions* to be printed, be regulated by the members who pay, rather than by the number of members who may be on the list. By these means your Council consider that a saving will arise in the expenses of the publications.

Your Council take the opportunity now afforded them of recording their conviction that the recommendations of the Publications' Committee, contained in their report to the Worcester Council, and to the Anniversary Meeting at Derby, have been acted upon as far as was practicable, and the character of the *Journal* has been thereby much improved,—a result for which a debt of gratitude is due from the Association to the late Dr. Streeten, who made it his constant study to give effect to every improvement in the publications. Acting on this principle, he, as Editor of the *Journal*, aided Mr. Hunt and Mr. Crompton in their laudable inquiries into very important subjects. The results of Mr. Hunt's investigations have been already placed before the Society through the medium of the last volume of *Transactions*, and Mr. Crompton will at this Anniversary lay before his brother Associates the conclusions which he has arrived at from numerous returns made by the members to his queries on burns and scalds.

Your Council cannot omit mentioning that they consider the Association admirably adapted to collect together the scattered experience of a large body of medical men residing in the provinces, and placed under different circumstances, whether in cities or country districts; and they cannot help hoping that this mode of investigation, so auspiciously begun, may be carried out to its legitimate results; and that, more particularly, the efforts of Dr. Ranking, thus to elucidate the remedial powers of cod-liver oil, may be crowned with success.

MEDICAL REFORM.

The year has passed away with scarcely any progress being made in what is called medical reform. It is true that a Bill has been promised, of a comprehensive nature, to be brought forward under high authority, but it has not appeared. It will be the duty of your Council to watch narrowly any measure that may be brought forward, and unless it carry out the cardinal principles for which the Association have for many years contended, and which are embodied in several memorials presented to her Majesty's Government, and in petitions to the Legislature, your Council will do all in their power to prevent its passing into a law. At the same time they rely with great confidence on the justice and wisdom of her Majesty's government, who, they believe, are earnestly desirous to settle this question in a just and equitable manner.

PAROCHIAL MEDICAL RELIEF.

Those laborious and ill-requited officers, the Poor-Law Medical Attendants, are still struggling with the embarrassments of their position. A favourable impression with regard to them has been made on the public mind, which has reached the House of Commons, and it would be quite inconsistent with the known honour and humanity of Englishmen to think that so incongruous a state of things should continue, but the parochial medical attendants yet have difficulties to encounter, and it will be a duty incumbent upon your Council to take every favourable opportunity of assisting them in their just claims.

BENEVOLENT FUND.

For years this fund has languished for want of that cordial support to which its high importance and its genuine philanthropy entitle it. Your Council sincerely hope that the time is arriving when its inefficiency will no longer be deplored; and they ardently anticipate that this branch of the Association is at length beginning to flourish, and that the Committee will on the present occasion make a more favourable report than on any former one; but the fund will still require most active assistance from the benevolent, ere it can be placed in the position it ought undoubtedly to occupy.

DISTRICT BRANCHES.

Of the district branches we need only remark, that they still fully answer the purpose for which they were instituted, and continue to be local re-unions for the members in their several localities. The only alteration to be reported is, that the Newton Branch has changed its name, and has become the Lancashire and Cheshire Branch of the Association; and the Taunton and Somerset Branch to that of West Somerset Branch.

SECRETARY AND EDITOR.

The lamented death of Dr. Streeten has created a vacancy in the office of Secretary, and also in that of the Editor of the *Journal*. The Council are of opinion that these offices combined are too laborious for any one individual, and they recommend that in future they be not both held by the same person; the office of Secretary will of course be filled up in the usual manner at this Anniversary; and they advise that Mr. Sheppard, who has kindly undertaken the duties, *pro tempore*, and who also was formerly Honorary Secretary, be appointed the Secretary. As several applications have been made by members for the Editorship of the *Journal*, the Council believe the best mode will be to refer these applications to a Committee, who shall be empowered to appoint an Editor.

CONCLUSION.

In concluding this report, your Council entreat you to have constantly present to your minds the necessity for unremitting exertions to accomplish the objects the Society aims at. This is especially desirable when for the second time you meet in the birthplace of the Association; for although, as a Society, you have during the seventeen years that have glided away not been inactive, yet all must feel that the full benefit that might have been produced has not been realized. How many of the members during that short period have been removed, in the midst of health and activity! Let those that remain still, whilst health is spared to them, ardently work in the fruitful field which this Association invites them to cultivate: then an abundant harvest will be gathered, and every member will share in the rich return that will reward the labours of the Association.

N.B.—The members of the Council are requested to notice that the subscriptions towards the Council Fund are received by the President of the Council.—A subject for a Prize Essay will be advertised soon after the Anniversary Meeting at Worcester; and it is very desirable that the subscriptions should be paid by that time.

ALTERATIONS OF LAWS.

Dr. Hastings gives notice, that in Rule 7, after the words "correct the Press," the words "if directed by the Council" be inserted.

FINANCIAL STATEMENT.

The Secretary then read the Treasurer's Statement of Accounts, of which the following is an analysis:—

Receipts.

	£	s.	d.
Balance from last year	18	0	4½
Subscriptions, 1848-9	1574	4	6½
Transactions, Sale of	7	18	5
Journals, Sale of, and Advertisements ...	117	17	0
	£1718	0	4

Expenditure.

	£	s.	d.
Printing, publishing, &c., Vol. 16, Transactions	429	10	7
Printing the Journal, Stamps, &c.	700	0	0
Editing ditto	268	4	0
Secretary	105	0	0
Anniversary Expenses, 1848	29	10	0
Branch Expenses	31	15	7
Plates and Wood-cuts, &c., for Transactions and Journal }	93	13	6
Postage, Stationary, and Incidental Expenses ..	44	4	2
Balance in Treasurer's hands	16	2	6
	£1718	0	4

Dr. BURROWS, of London, in moving the adoption and printing of the Report, felt perfectly satisfied that it was not likely to meet with any dissent, and if there was anything required to be said, the gentleman who had been requested to second that resolution, would most ably supply any deficiency in what he might advance. The Report was so full of interesting matter, and so compendious, that in the few minutes in which the Secretary was occupied in reading it, he had gone over a vast variety of topics informing them how much had been done by the Society in the past year. It was impossible for so young a member as himself to speak on the various topics embraced in that Report, and therefore he would merely ask the members of the Association to join him in giving their fullest assent to it. If he should not be out of order in doing so, he should be very glad that the gentleman who was to second it should, with the consent of the Association, make some slight amendment, or rather addition, to it, and that was, that with the Report of the Council should also be printed and circulated the very beautiful and eloquent Address which they had heard from the lips of their President that day. He would not say that it was an unexpected pleasure to him to hear that stream of eloquence, conveying as it did the noblest sentiments; for an uninterrupted and cordial friendship of thirty years with Dr. Hastings, enabled him to state

that those were the real sentiments of his heart. If he looked back a period of a quarter of a century, when he came here as a stripling, and entered the wards of the Worcester Infirmary; when he traced the course of the Association, and remembered the untiring energy and zeal of their President in promoting its objects, and witnessed his efforts for the advancement of medical science, he owned he was not surprised at hearing an address of such fervid eloquence, although perhaps gentlemen who had not known Dr. Hastings so intimately, might well be astonished. If, then, it was consistent with the rules of the Association, that such an addition should be made to the resolution, he was sure it would gain the most cordial assent of all who were then present, that the business matter of the Association should not go forth to its members unaccompanied by that oration, which would stimulate them all to renewed efforts for the advancement of the noble profession of medicine.

Dr. LITTLE, of London, said, that although unexpectedly called upon to second the motion, he did so with a great deal of pleasure. He would not detain the meeting long, for, notwithstanding the observation of Dr. Burrows, he thought he had said all that could be said upon the subject. The able address of the President, and the report that had been read, had fully acquainted the members with the present condition and future prospects of the Association, which he had no doubt would obtain the success that had been predicted, notwithstanding that at present the funds could not be said to be in a satisfactory state.

The adoption of the report was then carried unanimously, and the suggestion for printing the President's Address was put to the meeting by Dr. Burrows, and carried by acclamation.

APPOINTMENT OF SECRETARY.

Dr. J. CONOLLY moved that J. P. Sheppard, Esq., F.R.C.S., be elected Secretary to the Association. It gave him the greatest pleasure to find that after a period of seventeen years, that gentleman retained so warm an attachment towards the objects of the Association as to be willing to accept that office again. The general experience of Mr. Sheppard, in conjunction with Dr. Hastings, had led to all those happy results that had been portrayed with so much eloquence and truth.

Dr. FORBES seconded the resolution with great pleasure, and said that after the remark they had just heard from Dr. Conolly, it became unnecessary for him to enlarge upon the services or good qualities of Mr. Sheppard.

The resolution was carried unanimously.

J. P. SHEPPARD, Esq., in returning thanks for the honour they had so unanimously and kindly conferred upon him, called the attention of the Association to that part of the Report of the Council bearing reference to the payment of the subscriptions, and remarked that at the present time there were arrears of subscriptions, only reckoning those who were in arrear more than three years, of £1823. It was absolutely necessary, in order to make any progress in the objects of the Association, to proceed on more stringent

principles with reference to the payment of the subscriptions, and it was with that view that the Council had come to the resolution, of at least preventing the defaulters becoming an expense to the Association, by depriving them of the future publications of the Association. They might see from that statement that he had no little labour before him, but with the support and co-operation of the Society, he would unflinchingly do his duty.

APPOINTMENT OF AUDITORS.

F. FLOWER, Esq., of Chilcompton, moved that J. S. Bartrum, Esq., of Bath, and P. Martin, Esq., of Reigate, be requested to act as auditors of the Treasurer's accounts at the present meeting.

The motion was seconded by Dr. HEYGATE, of Derby, and carried unanimously.

J. HATTON, Esq., of Manchester, suggested, that before another resolution was passed, the serious matter of arrears should be taken into consideration. He was certain that unless very stringent measures were adopted, the arrears would never be obtained, and they were only adding to the expense of the Association, and the trouble of the Secretary, by retaining the names of the members so much in arrear on the list. They had gone on year after year adding to the amount of the arrears, and never heard of any steps being taken to collect them in. He thought the mere discontinuing the publications of the Association to the defaulting members would be inadequate, and mentioned the case of some members who had never subscribed more than their first guinea; and in some cases the Association had been put to the expense of from £10 to £15 to print their communications. In their own Branch they had found it necessary to adopt very stringent measures, and he should suggest that the following rule which they had adopted there should be also adopted by the General Council at Worcester:—"That when any member has been in arrears of subscription for three years, an application be made for the same by the Secretary, and then, if the arrears are not paid in one month after such application, the name of that member be erased from the list of subscribers; but that such a proceeding should not be deemed either in honour or equity to release the defaulting members from their past arrears." It would be satisfactory to the meeting if the Chairman would state what decision they had come to at the Council meeting.

The PRESIDENT said that the resolution which the Council had arrived at was to carry out stringently one of their own rules, which empowered the Secretary, when any member's subscription was in arrear, to withhold the *Transactions* and *Journal* from him, and after a good deal of consideration, they thought that if that law was strictly acted up to, it would remedy the evil; for it would at least render the defaulters no longer an expense to the Association. If those measures were not found sufficiently stringent, an alteration of the law might be made at the next Anniversary Meeting, by giving three months notice, but it must be remembered that at the present meeting they could not alter the laws.

Some of the members suggested an appeal to the

County Courts, but the President refused to entertain the idea of such a proceeding.

J. SODEN, Esq., of Bath, moved "That the thanks of this meeting be given to Geo. Norman, Esq., F.R.C.S., the retiring President, and that he be appointed a Vice-President of the Association." He had had the happiness of enjoying an uninterrupted friendship with their late President for many years, and he could with justice and truth bear witness that never was a gentleman esteemed more highly in his profession, or was more deserving in his private relations of life. He was at the head of his profession, not only in Bath, but throughout the whole district, and was deservedly respected and beloved by all classes. He (Mr. Soden) felt more than he could say, and he would therefore content himself with simply proposing the resolution.

Dr. ROBERTSON, of Northampton, said it gave him particular pleasure to second the motion; and they could all bear witness that no gentleman ever filled the chair with more ability than Mr. Norman.

Carried unanimously.

Mr. NORMAN briefly acknowledged the compliment which had been paid to him.

Dr. TUNSTALL, of Bath, then moved "That the thanks of this meeting be given to the Council of last year, and that the following additional members be added:—

Dr. Williams,	Worcester.
Thomas Stephenson, Esq.,	Worcester.
Richard Hill, Esq.,	Worcester.
Dr. Butter, F.R.S.,	Plymouth.
John M. Faircloth, Esq.,	Northampton."

In moving this resolution, Dr. Tunstall took occasion to refer to the question of arrears, and announced the gratifying fact that in Bath he had been informed by the secretary that there was only one defaulter. He (Dr. Tunstall) wished that fact to go forth to the Association, as it was an instance of what might be effected through the instrumentality of an indefatigable council and an active local secretary. He thought it was very little use to report defaulters to the general Council at Worcester, but very much good might be effected by reporting them to the local Council, for then it became known among his professional friends, that so and so had not paid his subscription, the result of which would be, that he would not long remain a defaulter.

Mr. LAMBERT, of Thirsk, seconded the resolution, which was carried unanimously.

APPOINTMENT OF EDITOR.

Dr. CONOLLY, of Cheltenham, moved the following resolution:—

"That the President and Vice-Presidents of this Association be appointed a Committee, to make such investigations as they may think necessary, into the qualifications of those gentlemen who may be willing to undertake the office of editor of the *Journal*, and that they may be empowered to fill up the office, and to report their appointment to the Council within three months, such appointment being subject to confirmation or rejection at the Anniversary Meeting in 1850."

He had very great pleasure in making this motion, for he was quite confident the meeting would feel the

importance of the subject. Very much of the progress and influence of the Association must depend upon the editor of the *Journal* and the other publications, and therefore the appointment of that gentleman was one of great moment, and requiring the deepest consideration. The appointment could be only filled up by a Committee, and the gentlemen forming the Committee which he had named were all parties who had had to do with the working of the Association. They had all passed the chair, had had a year of office, and knew pretty well what was required, and therefore they were unquestionably the most competent persons to appoint. At the same time it would be observed their selection was not final, and if disapproved of might not be confirmed. Whoever was selected would conduct the publications for the year, and then it would rest with the Anniversary Meeting of 1850 to confirm the appointment or not, as they thought proper. He thought, therefore, there could be no objection to the appointment of the Committee he had named. With reference to another subject, he would just say one word. It was expecting too much of the General Secretary to collect all the arrears; he depended very much upon local secretaries and local collectors. He had been a collector for his Branch of the Association for several years, and he was proud to say that he did not think there was one single defaulter.

Mr. PIERPOINT, of Worcester, seconded the proposition. Dr. Conolly had said everything that was necessary to be said, and he should not therefore further detain the meeting.

The PRESIDENT, in putting the resolution, said that it was a subject which had necessarily engaged the attention of the Council at various times, and every mode of dealing with it had been found beset by difficulties. After various consultations and great consideration, they had come to the conclusion at the Council meeting, held on Tuesday night, to deal with it by means of a Committee.

Mr. BARTRUM, of Bath, said that he had an amendment to make to the proposition. As Dr. Conolly had said truly, the editorship of the *Journal* was a matter of very great importance, not only to the publication itself, but to the existence of the Association. He thought that the editor of such a publication should not only be well versed in everything relating to medicine, but possess an extensive knowledge of the general literature of the day. He had not the slightest objection to the President and Vice-Presidents of the Society forming a portion of the Committee, but he should wish to add to them the following gentlemen, with the view of carrying out the principle of taking them from various localities, and thus have the greatest amount of talent combined upon one object, and that object so important as the selection of an editor to the *Journal*. He was sure the extensive knowledge and well-known talent and discrimination of the gentlemen he should name would be found materially to assist the choice of the Committee in selecting a proper individual to fill so arduous and responsible an office. He then moved that the following gentlemen form an addition to the Committee:—Dr. Forbes, Dr. Budd, Dr. Greenhill, Dr. Cowan, and Dr. Bell.

Mr. FLOWER, of Chilcompton, said he should have particular pleasure in seconding the resolution. It was a question on which the Association generally felt very strongly; and he had had communications from several members of the Association residing in different parts of the country, and they were all fully convinced of the importance and absolute necessity of having a gentleman to perform the editorial duties of the *Journal*, well known in medical literature as well as in general literature. He should also suggest that the name of Mr. Bartrum should be added to the list. It was necessary to obtain the most varied talent, and he thought if Mr. Bartrum's name was added, everything that could be possibly done would be effected to obtain the assistance of a gentleman, as editor, of the most extensive knowledge and varied talent.

Mr. PIERPOINT inquired the number of Vice-Presidents, which was found to be eleven, the names being read by the President.

Mr. CROMPTON thought the present an admirable opportunity for the Committee to take into consideration the general management of the *Journal* and its cost of production, for he had good reason for supposing the cost of the production of the *Journal* at Worcester was greater than if it was done by one of the first London houses, and in the first London style; and he had the opinion of a most competent judge, to whom the *Journal* had been submitted, whose remark was, that the *Journal* was badly printed on bad paper, with bad ink, badly edited, and he might say, badly folded. Under these circumstances, then, he thought there was the most urgent necessity for inquiry, and he should be delighted if some person would come forward and ask for an investigation, for he was quite sure that it would be found much to decrease the cost of the production; he should, therefore, beg to move as an addition to the amendment, "That the Committee should make such an inquiry into the business of the *Journal*, more especially with reference to the cost of its production, and also as to whether it was desirable that it should be continued to be printed at Worcester."

The PRESIDENT observed that the proper course would be to put the amendment first, then the resolution, and then to put Mr. Crompton's suggestion as a substantive motion, after the other business on the paper had been disposed of.

Mr. NORMAN wished to know whether the Committee to be appointed for the selection of an editor would have power to consider the question generally; whether they could select an editor for the *Journal* from any member of the Association, or whether it is necessary that the editor should be a resident of Worcester; for unless that were understood, the Committee would feel themselves very awkwardly placed.

The PRESIDENT.—O! certainly. You know with respect to the publication of the *Journal*, it is at present one of our rules that it must be published in Worcester, but the Committee would deliberate upon the selection of an editor, without regarding particular localities.

The amendment was then put from the chair, and lost by a large majority, and the original motion for the appointment of a Committee, consisting of the

President and Vice-Presidents only, was carried with one dissenter.

PROPOSED ESSAY ON THE EPIDEMIC VISITATION OF CHOLERA.

Mr. FLINT, of Stockport, then moved the following resolution:—

"That the Council be requested to take into their consideration whether it will not be desirable, as soon as the present epidemic visitation of cholera has passed away, to issue a series of questions to the members similar to those issued after the close of the epidemic catarrh, in 1837, requesting information respecting the origin, progress, and duration of the epidemic; its symptoms and treatment; the atmospheric phenomena preceding and attending it; together with such other particulars as may be necessary for the elucidation of many questions of interest connected with its appearance."

Dr. COWAN, of Reading, seconded the resolution. The question of the nature of cholera was one that required the most extensive investigation. The symptoms of the cases were often so contradictory, and so many different statements had been made by various practitioners in distinct localities, that unless a vast amount of authentic information could be collected, no beneficial results could be arrived at. Nothing but a large aggregate experience brought to bear upon the subject could accomplish what was required, and no pursuit was more worthy of the members of an Association of this character, than labouring to bring together a vast amount of facts from which probably some sound conclusions would be drawn as to the nature and remedy of this epidemic.

The resolution was put from the chair, and carried, as a matter of course.

Mr. CROMPTON, of Manchester, then brought forward his resolution, and reiterated the statement he had made about the getting up of the *Journal*. He said that the possession of that publication was always held out to the profession as a great inducement to them to become subscribers, and put the following curious test of the value of the publication of the Association:—He saw in a catalogue of a book sale, twelve volumes of the *Journal*, some nicely half-bound, and the others in cloth, offered at such a price, as, taking away the cost of binding, would hardly pay for the cost of the stamps.

Dr. CORMACK, of Putney, said that he was not an advocate for change without good reason or for complaining without cause. They were so much indebted to the Central Committee for the time they had bestowed upon the Association, and the devotion of the great talent they possessed to the same cause, that he looked at anything like an aspersion upon their management with very great jealousy. It had certainly not been his lot to meet with complainers of the *Journal*, either as to its printing, or paper, or ink, or folding, or editing; but he did feel grieved, that while they were sorrowing over the loss of a most eminent and estimable member of the Association, an opportunity should be taken to fix a stigma on the editorship of the *Journal*. Though he had nothing particular to propose in getting up, yet he wished it to be under-

stood that he never heard the *Journal* complained of, and he himself was exceedingly well satisfied with it in all its departments, and objected to passing such a general censure on its management as was contained in the motion.

The resolution was seconded by Dr. Greenhill, of Oxford.

Dr. ROBERTSON, of Northampton, also bore testimony to the value of the *Journal*. It was looked for regularly as it came out, and there was one most noble feature in it, that whatever might be its character, it had never disgraced itself by asperities, but had endeavoured to cultivate good feeling among all classes of the profession. It had been conducted for many years, during the whole of which the editors might say, "I have never hurt the feelings of one worthy man." He then ably exposed the fallacy of endeavouring to test the value of a publication by what it was intrinsically worth to the keeper of a book stall, or by the price at which it could be sold by auction.

Mr. CROMPTON explained that he did not wish to cast an imputation on the late editor, and also withdrew his remarks relative to the commercial test he had applied with reference to the value of the *Journal*.

A short discussion took place on the subject, in which Dr. Heygate, of Derby, took the same view as that taken by Dr. Robertson, and

The PRESIDENT, in putting the resolution, whether the Committee should report as to the desirability of changing the place of publication from the city of Worcester, said, that in point of fact, the Council had been considering attentively how they could lessen the expenditure upon the *Journal*. Two years ago the whole matter had come before a Committee of inquiry and considerable alterations had been effected; and he must say, that their publisher, Mr. Churchill, who was a very extensive publisher in London, and a man of great knowledge on the subject, had told him (Dr. Hastings) only the other day, that so far from thinking there was any extravagance or bad management, he was only surprised that the Association could give so much matter as they did to their members, for so small a subscription.

The motion for the inquiry was negatived by a large majority, there being only four who supported it.

MR. EDWARDS'S CASE.

The PRESIDENT then said that he had to bring before them a matter of great delicacy, respecting Mr. Edwards, of Wiveliscombe. The facts were these:—Some time since a Mr. Blake had, by means of false certificates, obtained a diploma from the College of Surgeons, and commenced practising. The Somerset and Taunton Branch of this Association took the matter up, and brought it before the College of Surgeons, who were so satisfied that the matter was as stated by the Branch, that they removed the name of Mr. Blake from their list, and he was consequently deprived of his diploma. He still, however, continued to practise in Taunton; but the profession at Taunton considering that he was an unqualified person after being deprived of his diploma, refused to associate with him, or meet him in consultation. Mr. Edwards, on the con-

trary, although living eleven miles from Taunton, had frequently gone to that town, after the declaration of the professional gentlemen, and entered into consultation with Mr. Blake. In addition to being a member of the Association, Mr. Edwards was the President-elect for the Taunton Branch for the ensuing year; and the Branch brought the matter before the Worcester Council in May last, and had put three questions to them:—first, as to whether Mr. Blake was a qualified practitioner; and if not, whether Mr. Edwards was justified in meeting Mr. Blake in consultation; to both of which questions they had answered in the negative; and, thirdly, they had asked what, under the circumstances, the Worcester Council would advise them to do with regard to Mr. Edwards being the President-elect. The advice they had given them was, that they should request Mr. Edwards to resign the Presidency, which was accordingly done, and Mr. Edwards resigned. Mr. Edwards's name still remained on the books of the Association; it could not, however, remain longer under the circumstances, and it therefore became necessary to carry into operation the 22nd rule, which was framed for the purpose of meeting such cases.

The following resolutions were then unanimously carried:—

Proposed by Dr. Woodforde, and seconded by Dr. Heygate,—

"That at the request of the West Somerset Branch of the Association, it is proposed that the name of A. F. Edwards, of Wiveliscombe, be removed from the list of members of the Association, on account of unprofessional conduct in habitually consulting with an unqualified person."

Proposed by Mr. Soden, and seconded by Mr. Flint,—

"That this meeting express its high admiration of the West Somerset Branch, in acting with so much decision and energy in upholding the dignity and honour of the profession, by bringing before the Association the unprofessional conduct of Mr. Edwards, and that the thanks of the meeting be given to the West Somerset Branch, and also to the Central Council, for their judicious advice on this unpleasant occasion."

MEDICAL ETHICS.

Dr. Conolly of Hanwell, then moved the following resolution, which was seconded by Mr. Crang, and carried unanimously:—

"That a Committee of five members be appointed to consider the means advisable to be adopted with a view to bringing the subject of Medical Ethics before the medical profession."

The following gentlemen were named on the Committee:—Dr. Greenhill, Dr. Robertson, Dr. J. Conolly, Dr. Mackness, and Mr. Flint.

Proposed by Dr. Conolly, and seconded by Mr. Bartrum,—

"That the Committee appointed by the Council to consider the best mode of bringing the subject of Medical Ethics before the Association, be requested to draw up a short code of Medical Ethics, which shall be forwarded to the Council of the Association previous to the Annual Meeting in 1850."

This concluded the business part of the meeting, and papers and cases were then read.

COMMUNICATIONS.

A case communicated by Dr. Radford, of Manchester, was read for him by Mr. J. H. Walsh, Worcester. The paper gave an account of a most successful Cæsarean operation in a case of labour, which, in consequence of *mollities ossium*, rendered an attempt at delivery in the ordinary methods entirely useless. Dr. Radford expressed his belief, that the Cæsarean operation, though the cases reported were for the most part unfavourable, yet, if the condition of the patients were carefully considered, and the labour was not protracted, but the operation performed as soon as possible, the results might be much more favourable, and he doubted if it was not even now more generally successful than the use of the crotchet, which was so much more common. The reading of this able and lucid paper appeared to give much satisfaction to the meeting, but being too long for insertion here, must be deferred to a future number.

Mr. Crompton, of Manchester, read a very interesting paper on burns and scalds. He had collected the opinions of a great number of practitioners upon a subject on which there was a great deal of difference of opinion. The pains in burns he attributed to the current of air over the injured surface—those substances, therefore, which best imprisoned the air, were the best to be applied in such circumstances. He gave the preference to flour over cotton wool. He concluded by exposing a piece of newspaper, which had been soaked in sulphate of ammonia, to the flame of a candle—though the texture of the newspaper was destroyed, it did not take fire. The heat caused the ammonia to fly off, and the sulphuric acid being set free, charred the paper. As the sulphate of ammonia did not the slightest injury to the texture of the fabric, it was most desirable as a non-combustible application for children's dresses, bed curtains, &c. This paper also will be published entire, either in the *Transactions or Journal*.

Mr. Kitsell, of Droitwich, then read as follows:—

Successful Case of Puncture in Hydrocephalus.

In presenting the following case of hydrocephalus to your notice, I will do so as briefly as possible, and must beg to be excused any defects connected therewith, since I had not decided until just before the meeting on reporting it. My time having been fully occupied, I shall not, I fear, do that justice to the case which its importance imperatively demands. As the symptoms of the disease, acute and chronic, are now so much better understood, a minute account of them here would appear superfluous, and occupy too much of your valuable time; I shall, therefore, content myself with a general report of the case, which, as it occurred in one of my own children, a boy, now in his eighteenth month, I am enabled to give in a manner that will, I trust, although imperfect, meet the approbation of my professional brethren.

The case must be considered not only of an interesting but of an instructive character, inasmuch as it differs from the few on record, particularly as regards the treatment pursued in connection with, and subsequent to, the

operation, which was performed with a small hydrocele trocar (about three times the size of that used by Dr. Conquest), and which ended in the most satisfactory and successful result, the child being then between nine and ten months old.

As the subjects of this affection, more particularly of the chronic variety, are considered by most authors to be of a strumous diathesis, I must observe that my children (nine in number), have never manifested any symptoms of the strumous habit, nor is there any hereditary trace of constitutional disease connected with the family, beyond the one which forms the subject of this communication.

It was not until the child approached the age of eight months that any decided symptoms of cerebral affection manifested themselves, and even then, for some time, they were of that sub-acute character which often puzzle the most eminent of the faculty, and which too frequently end in the destruction of their victim; therefore any means leading to a successful issue must be hailed with satisfaction and delight, not only by the members of an enlightened and honourable profession, but also by the parents, guardians, and friends of some of the most interesting part of the creation.

In alluding briefly to the more important symptoms, it is evident that a large majority of these cases are preceded by, or connected with, hepatic, abdominal, or gastro-intestinal derangement, which prevailed in the present case for a considerable time previous to the more urgent symptoms, the motions being variable, frequently of a gelatinous appearance, and often of that light colour indicative of hepatic derangement, with paucity of urine, copious perspirations about the head and neck, occasional vomiting, frequent weak pulse, furred tongue, restlessness, loss of flesh, particularly of the inferior extremities, approaching a cachectic tendency, for which the usual remedies were applied in vain. As the symptoms gradually increased, the head becoming enlarged, caused separation of the parietal bones throughout the line of the sagittal suture, to the extent of two inches, with inclination of the head to the left side, which was considerably the larger, retaining such inclination for nearly three weeks after the operation, the anterior fontanelle being extremely tense and convex, the frontal region very capacious.

In combination with this advanced stage of the case the symptoms assumed that marked character which you will anticipate, viz., rolling of the head on the pillow, frequent tendency to coma, contraction of the thumbs and feet, tremulous motion of the eyelids, alternate flush of the cheeks, the slow pulse of compressed brain, stertorous breathing, dilated pupils, with strabismus, and, lastly, frequent convulsions of the most distressing character, numbering fourteen in thirty hours, with opisthotonos, blackened countenance, foaming at the mouth, &c., each fit threatening the immediate extinction of life.

After watching my little patient anxiously and almost constantly for several days and nights, and seeing that death appeared inevitable, I resolved on puncturing the head, which operation I performed about one o'clock in the morning of the 6th of April last, during a convulsion, as being preventive of pain, the trocar being passed to the depth of two inches before any fluid escaped, which I attribute in some measure to its being passed very obliquely, with a view to render the puncture as valvular as possible, the instrument being introduced

about an inch below the anterior superior angle of the left parietal bone, in the direction of the lateral ventricle. About sixteen ounces of limpid colourless fluid was speedily drawn off, which appeared to act like magic in subduing all the bad symptoms, no convulsion occurring afterwards. Instead of closing the wound with a compress and retentive bandage, I encouraged the discharge of fluid, by occasionally cleansing and opening the puncture, thus allowing it to escape, probably as fast as it was secreted, and which continued about five days and nights, gradually subsiding, after soaking a large number of napkins, the total quantity being computed at about four pints; which slow discharge probably caused gradual contraction, or consent between the containing and contained parts, so that, in all probability, no vacuum was formed, and the danger of suddenly removing long-continued pressure from the brain was in a great degree averted; hence the happy result, which appears to have ended in a complete restoration to health and vigour, the head (now nearly four months since the operation) retaining its diminished size, the various sutures being closed, the anterior fontanelle much contracted and flaccid, the cerebral pulsations being distinctly felt, and the head, which, previous to the operation, was nearly bald, is now thickly covered with hair.

Having communicated with Dr. Conquest, of London, who has operated in similar cases, I have the satisfaction of stating that, after congratulating me most sincerely on the successful issue in this case, he feels assured that if he had adopted my mode of procedure, he should have saved more children, thus intimating that a larger trocar and gradually promoting a discharge of the fluid, by keeping the aperture open, are essential to a successful issue. I must not omit this opportunity of most cordially thanking that gentleman for his very kind attention to my communications and suggestions.

In conclusion, allow me to call attention to the fact, that children frequently suffer much injury to the brain from the tightness of the cap-strings or throat-band, especially during the acts of crying, vomiting, and from rolling about in bed during the night; the cap being drawn away, the throat-band acting like a ligature; which various changes are not much noticed by nurses having the ordinary care of them. A band of Indian-rubber or such material, where caps are needed, would be far preferable. It is my intention to avail myself of any similar cases which may offer, and to investigate them more fully. Should any of my professional brethren here present know of any similar case, I shall feel much pleasure in conferring with them on the subject.

The meeting then adjourned until eight o'clock.

SECOND GENERAL MEETING.

The members met again at eight o'clock, in the Natural History Society's Rooms, when the chair was again taken by Dr. Hastings.

BENEVOLENT FUND.

Mr. NEWMHAM, of Farnham, read the following Report of the Benevolent Fund:—

REPORT.

The Committee of the Benevolent Fund are again called upon to present to their constituents a Report of their proceedings during the past year,—a year the most remarkable in their annals for the increased support

they have experienced, as well as for the largely increased demand upon their resources. Their receipts during the last year, have been larger than the former, and have more than doubled the amount of any other corresponding previous period; while their expenditure in benevolent aid has also more than doubled that of any preceding year since the formation of your Institution. Your Committee hail both these symptoms as demonstrative of the facts, that your Fund is better known and more justly appreciated; and that, in proportion as it has become so, it has conciliated the regard and the sympathy of a greater number of friends, and has unveiled a larger portion of that mass of misery, which exists unrelieved and unrelievable, except by the instrumentality of your Institution.

It becomes the duty of your Committee, however, to point out to you the truth; that while their subscribers have increased both in number and amount, this increase of subscriptions has by no means kept pace with the increase of their benevolent aid; and that while at their last report they commenced their year with more than £100 in advance, they will have to begin the present year with a small balance of £29. 4s. 11d. The important inference to be drawn from this statement is, that unless the number of subscribers be increased, or the number of applicants be diminished, the latter cannot be relieved in the same proportion as during the last year. Nor has this state of things arisen from a lavish expenditure of your funds; on the contrary, your Committee have repeatedly been constrained to give only half the sum which their judgment and good feelings told them to be required; and in several other cases of a less urgent character, they have been compelled to decline relief altogether, or to postpone it to a future year. And with these facts in their possession, your Committee feel bound to call upon each one of their subscribers to advance the interest of their Fund, by endeavouring most earnestly to procure fresh subscriptions and additional support: and then they confidently expect, that in a few years they shall be able to look upon their Fund, as worthy of the profession which it represents, and of the sufferers for whose relief it is administered.

Your Committee have observed that during the past year a far greater number of cases (34) have been relieved than during any former year; and they must add, that the instances of misery and destitution, and of the most abject indigence, have been of a more deplorable character than heretofore; they feel, therefore, that they are justified in making a stronger appeal to the hearts and to the purses of their supporters, because they have done more than they have ever done before, and have relieved a greater amount of wretchedness, and are therefore able the more confidently to ask for your support, to enable them to continue a course of practical benevolence, which events have proved to be most necessary and most useful.

Your Committee have been most painfully reminded during the past year of the importance of possessing some permanent fund, from which misery and poverty of a permanent character might be relieved in the shape of annuity, and they have therefore anxiously considered the best means of bringing their Donation Fund into action. They conceive that the time has arrived when, by a great simultaneous effort of themselves and their friends, that Fund may be carried up to the amount required, before its income may be thus applied, viz., £2000; and with this conviction they have resolved on making an appeal to each one of their subscribers, and to each member of the Association, and to others not connected with the Association in support of their great object, by making special donations.

And your Committee would call attention to the circumstance of the munificent bequest and donation made by the late Mr. Carmichael (amounting together to £5000) to the Irish Benevolent Medical Fund,—a fund established after our own, and precisely formed on its model, for which purpose your former Secretary furnished them with copies of our constitution, rules, and regulations. Such an example is, indeed, worthy of imitation by those whom Providence may have blessed with the means of doing so.

They especially invite the assistance of LADIES, the wives of their medical friends, to interest themselves in this truly feminine, because good work:—well assured of their complete success, if they can but secure the co-operation of such coadjutors.

Your Committee feeling the importance of the step they have taken, are bound also to express a caution, lest the donations thus given should take the place of regular subscriptions: this would be to destroy the vitality of their Institution; for it has been shown that its subscriptions are inadequate to its expenditure; and if these should in any way be curtailed, the most serious evils must ensue. Each fund should be held subordinate to the other: above all things, the Subscription Fund must be supported and augmented; but there are many who would give a donation in addition to their subscription on this special occasion, there are others who prefer giving a donation only; and ladies have it in their power to pick up among their friends and acquaintance, a great many small sums, which in the aggregate will constitute a large sum. It should be stated, that these small sums, thus collected, will be placed either to the Subscription or Donation Fund account, at the option of the collector. This has been done during the last year, and in rendering thanks to those ladies who have interested themselves during that period, the Committee venture to say to each one of the thousands to whom their appeal may be sent, "Go and do thou likewise."

Your Committee beg to record their thanks to those who so generously assisted their Donation Fund during the last year, and in an especial manner to express their deep sense of gratitude to the Directors of the Medical and Legal Life Insurance Company for their munificent donation, as well as to the very considerable number of non-professional donors and subscribers.

Your Committee beg also to return their thanks to the Editors of the *Lancet*, *Medical Times*, *British Record of Obstetric Medicine and Surgery*, and the *Medical Directory*, for their kindness and courtesy in giving publicity to your Institution.

And finally your Committee would desire to place on record, their deep sense of gratitude to Almighty God, for the good they have been enabled to effect amongst their suffering brethren; and they humbly entreat the blessing of Heaven upon their future labours, that they may be enabled to follow, though at an immeasurable distance, the example of Him, who was "a man of sorrows and acquainted with grief."

JOHN BARON, M.D., President.

WILLIAM NEWNHAM, Treasurer and Hon. Sec.

Financial Statement for the Year ending June 30, 1849.

DONATION FUND.

	£.	s.	d.
Balance of last year	103	15	3
Interest for the year	59	10	0
Donations in the year	203	12	9
	366	18	0
Per Contra.....	186	14	6
Balance ..	180	3	6

SUBSCRIPTION FUND.

	£.	s.	d.
Balance July 1st, 1848	102	12	8
Subscriptions to June 30th, 1849, inclusive	416	15	2
	519	7	10
Per Contra.....	490	2	11
Balance	29	4	11

Balance in hands of Treasurer July 1st, 1849.

	£.	s.	d.
Donation Fund	180	3	6
Subscription Fund	29	4	11
Total	209	8	5

Dr. COWAN, of Reading, then moved, "That the Report now read be received and adopted; and that the thanks of the Association be given to Mr. Newnham, of Farnham, for his unwearied exertions in promoting the interests, and increasing the amount, of the Benevolent Fund, and that he be requested to continue his valuable services as Secretary." He observed that, if ever any gentleman deserved a vote of thanks from the Association, it was Mr. Newnham, for the earnest and zealous efforts he had made on behalf of the Benevolent Fund; for it was mainly owing to the personal exertions of that gentleman that there was any such Fund at all. Indeed Mr. Newnham was doing for the Association what every one of its members ought to do for themselves, devoting his whole strength and energy towards the accomplishment of that which might easily be accomplished by the cordial and united efforts of the Association as a body. The proper collecting and management of the Benevolent Fund ought to form a portion of the very constitution of the Association; they ought to include the humanity of the profession. There was no other profession upon earth to which so many difficulties attached themselves as to the medical profession. The circumstances of each member of that profession were continually altering from year to year, and there was none which required so great an amount of mental energy and physical power. They were constantly exposed to the most alarming casualties of every description, and, as a body, he thought the Association were morally culpable in omitting to make the institution of the Benevolent Fund an essential part of the Association, and in leaving it to the exertions (most honourable as they were,) of one individual, and that individual Mr. Newnham. He therefore implored the Association to come forward and accomplish that for their indigent brethren which they were unable to accomplish for themselves. For what nobler object, he would ask, could they associate, than for the alleviation of that distress which was the bitter portion of their less fortunate brethren? Who could tell how suddenly the Association might be deprived of Mr. Newnham's valuable assistance, and where, he asked, was the member that could succeed him if the hand of God should suddenly remove him from his labours in this world, to a place of eternal rest? Where could they find a person to perform the duties of the secretary—

ship of the Benevolent Fund, and do the work for them that Mr. Newnham had accomplished? Let them therefore combine, and let every individual member say,—"I will do something for the Benevolent Fund," and let them do this on a higher principle than that of being asked to do a benevolent act, but because it is an integral portion of the constitution of the Association. There would then be no painful personal appeals to individuals, for disguise them as they would, such appeals were always painful to the feelings both of those who gave, and those who received. Whatever debt of gratitude then they owed to Mr. Newnham, he (Dr. Cowan) felt that as a public body they were not acting as they ought to do, and he believed there was nothing more conducive to the prosperity of any Association, or more calculated to establish its character and standing, than the act of coming forward largely and liberally, and contributing towards the formation of a fund for the relief and support of their indigent brethren.

Dr. CONOLLY, of Cheltenham, seconded the resolution, and also paid a high compliment to Mr. Newnham for his noble and praiseworthy exertions in the glorious cause of charity. He was himself at one time the Secretary to the Benevolent Fund, and could bear witness to the unparalleled zeal and energy Mr. Newnham had shown in the good cause. He well knew the amount of labour required and the vast number of communications to be attended to, and he could safely say that during the two years Mr. Newnham had held the office, there had been more done than was ever done before. Mr. Newnham, in the able report he had laid before the meeting, has made an appeal to them on behalf of their Donation Fund. They were no doubt aware that that fund had never yet come into operation, nor could it do so until it had accumulated to £2000. It had now reached £1550, and they wanted £450 more before they would be able to bring it into operation. The fund, they knew, was to be devoted to the granting of annuities to the widows and orphans of indigent medical men. He hoped and trusted that that appeal would be responded to in such a manner, that before the next anniversary meeting the Donation Fund would have reached the amount required—£2000, and that Mr. Newnham, in his next report, would be able to announce that it had come into operation, and been attended by much good. He alluded to the deep and heartfelt expressions of gratitude which they had received from the recipients of the Benevolent Fund for the trifling help they had occasionally afforded. The fund was a purely benevolent fund, and all that was required to give a person a claim upon it who should make an application for relief was, that he should be a legal member of the profession, and of good moral character. They had doled out sums of £5, £10, £15, and sometimes £20; and had been enabled to do, even with those small sums, a degree of good which was astonishing, and which it gave them the greatest satisfaction to find estimated as it was. If, then, every member of the Association gave only a very trifling sum, they would be able to extend their donations, and effect a vast deal more good than they had already, and he hoped

that the appeal about to be made by the Committee would be crowned with success, and that the fund would continue to increase. He would just mention one fact with respect to the Irish Benevolent Fund. That fund was instituted after that of this Association, and they were applied to for a copy of their rules, and while the fund of this Association had been almost torpid, the Irish Benevolent Fund had gone on increasing, and was now in a most prominent condition. It was requisite, therefore, that they should make a strong effort, and if the members only knew how much good had already been done by the very small means that had been available, he was quite sure that they would feel themselves bound to come forward and give the Committee an opportunity of continuing their exertions for the relief of that distress in the medical profession which unquestionably existed.

The resolution was put from the chair, and carried by acclamation.

Mr. NEWNHAM begged to return them the most hearty thanks for the very kind and flattering manner in which they had been pleased to testify their sense of his exertions, and he would add, that as long as health and life was spared to him, he should be most happy to continue them. He trusted that eventually he might be able to carry out to the fullest extent all their desires, so as, as far as possible, to relieve some portion of that mass of wretchedness which existed in every part of the kingdom among the medical profession. He had been told to-day that it was an *infra dig* proposition; but where was the indignity? When their brethren were in distress, were they not bound to relieve them? Was it not the highest attribute granted to man that he might exercise the noble privilege of relieving the sufferings—aye, the starvation, of those around them? Was it below the dignity of Christ? No. Wherefore then should it be below the dignity of professional men? Away with such a notion to the winds. The only motive for such an assertion arose from that plague spot of the human heart—innate selfishness, which could only be washed out by that Christian principle of benevolence, which ought to be the greatest glory of them all. He felt how greatly his responsibility was increased by the lapse of time. At first when he took it up it was agreeable to him. He felt not the weight of responsibility, but year, after year, as they glided along brought with them such a deep and increasing responsibility, that he now felt as it were deputed by the Association to carry out one of the greatest objects and principles of Christianity. They had confided to him the relief of their distressed brethren, and the care of their widows and orphans; and he assured them that the weight of his responsibility was such, that every succeeding year he felt the absolute necessity for increasing exertions. He implored them, therefore, when they invested him with the power, to give him the means of relieving suitors, so that he might not be obliged to say to them, "Go, and come again to-morrow." He had received even that very afternoon the details of a case, one of the most wretched that he ever heard of. But he was full of hope, and trusted to the benevolent feeling and kindness that still existed in a large proportion of the

more favoured members of the medical profession, and which he believed only wanted to be called out by a knowledge of the distress, to assist him in greatly alleviating it. During the last year, altogether 120 individuals had been relieved, many of them he believed from the very pangs of starvation, and that at a cost of £490. 2s. 11d. Yet how little did that convey to them an idea of the vast amount of good that had been accomplished. Who could estimate the feelings of the broken-hearted widow, the deserted orphan, or the poor practitioner, borne down by suffering and illness, when they knew that although the selfish and scornful world had turned its back upon them, there were still professional brethren—brethren of the same family, who would take up their cause when deserted by all but their God and them, and do all they could in their power to relieve their necessities, satisfy their wants, and reinstate them in their position in the world. O! if they could only read the letters which the Committee received from the parties whom they had relieved, they would then see how highly estimated such an Association was. There was one letter, indeed, an extract of which he would read that they may *ex uno disce omnes* of the nature of the appeal made. It was the case of a widow to whom a grant had been made by the Committee, and the money was remitted to her from time to time. She wrote:—“O! did you know what a great comfort it is to have a little safe in your hands under the many privations we have to undergo. I do assure you I never apply unless in a case of urgent necessity, as in the last instance. Three of my children were on the bare ground for want of shoes. I sent them to get repaired; they would not give me time to pay for them, which I could have done by little and little, for indeed they would not send them home without the money. The children could not have another pair without applying to you; the scanty allowance of the parish”—mark the words, gentlemen—“I am thankful for; it supplies us with bread and little else; meat we never have, and have never tasted for many months. I have sat for the last six weeks with four scholars, who pay three pence per week; and the little we make by our needlework is not worth naming. Had it not been for the liberality of a lady, we could not have got on at all in this manner, for my children would have been naked.” He thought that letter needed no comment. If there were a heart there to which that letter did not go to its very core; if there were one hard heart not broken by that letter, he envied not that heart, and he envied not the position in which that man stood, nor could he envy him at his last hour, when he came to lay his head upon his dying pillow, and reflected that in his past life he had lived for himself and not for others.

The effect of Mr. Newnham's address, and the extract of the letter which he had read, were electrical.

Dr. GREENHILL, of Oxford, immediately rose, and suggested that if it would not be interfering too much with the business of the meeting, Mr. Newnham should immediately send round and obtain a subscription for the case he had just mentioned.

Dr. LINGEN, of Hereford, said, a few words that had accidentally dropped from Mr. Newnham were fixed indelibly on his memory—“The scanty allowance we

get from the parish just provides us with bread, and nothing more.” If no other words touched the heart than those, they were quite sufficient to enchain the attention. How glad then he was to see the question so ably taken up, and that a gentleman was standing forth to advocate its claims possessing some influence. The course adopted by Mr. Newnham was deserving of the highest success. Look at the zeal and energy he had shewn,—look at the vast amount of labour connected with the management,—the number of letters to be replied to in his own hand, and then coupling that with his own extensive practice, he asked them, was he not pursuing a most noble and high-minded course. He (Dr. Lingen) was ashamed to see what little eyes they had, when they saw what was to be done. Mr. Newnham's heart was in his cause, and his words of to-day would not fall to the ground and be forgotten. He felt ashamed of his brethren when he looked at the many wants of the widows and orphans of professional men, the severe privations to which they were exposed, and reflected it might be the case very soon with their own widows and children. He sincerely hoped that Mr. Newnham's exertions would not be in vain, and that the Association would pledge themselves to do something a little more handsome than they had done hitherto.

Other thrilling instances of distress and privation among the medical profession were narrated, and Mr. Hunt, of London, said that he was greatly fearful that, notwithstanding the very eloquent speech made on behalf of the fund, and the unparalleled exertions of Mr. Newnham, very little would be done unless a definite proposal was made. He was almost afraid to propose what he was about to submit, for the profession had been so much taxed in every way, that although there might be a few among them who ought to do a great deal more for their poor brethren, yet as a body they were poor enough. The time was, when the fee for medical advice was a guinea; at present it was, in most cases, a sovereign. Now, if they could get the extra shilling from the public, and place it towards a reserve fund for their indigent brethren, he thought much might be effected. He would suggest that all members of the profession should, when receiving a guinea for advice, appropriate the odd shilling to the Benevolent Fund.

Dr. FORBES, of London, said he understood that there would be a meeting of the friends and subscribers to the Benevolent Fund on Wednesday morning, in the Council-room, at which, perhaps, it would be better that all suggestions like the present should be offered.

The matter then dropped.

PHYSIOLOGICAL ADDRESS.

Dr. SIBSON, of Nottingham, then delivered the “Address in Physiology,” which elicited the greatest admiration. At the conclusion

Dr. MALDEN rose to propose a vote of thanks to Dr. Sibson. He observed that it did not often happen to any individual that he was called on to propose a vote of thanks to a gentleman who had so instructed and delighted them in the manner that Dr. Sibson had that night. He did not speak it to disparage any

other members of the Association; but he could not help saying that it was a very rare thing for an individual to have made himself so completely and thoroughly a master of his subject, or to have been able so completely to imbue his mind with all the details, as to be ready, as it were, at a moment's warning, by the aid of a few short notes, and a very slight reference to them, to place a subject so intricate and extensive as that which Dr. Sibson had treated upon that night so comprehensively and so powerfully, before his fellow associates. It was a great power—a vast power—a power for which Dr. Simpson had to thank Providence; and he must say that it was of very great advantage to the Association that he should so have had the power of condensation as to be able to put the meeting fairly into the possession of the results of his experience. A great deal also depended upon the selection of such a subject as should have an immediate practical operation, and in that Dr. Sibson had eminently succeeded. It gave him, therefore, the greatest pleasure to move the resolution.

Dr. BARNES, of Carlisle, seconded the motion. He had listened with much interest and pleasure to the very excellent address they had just heard, and it must have cost Dr. Sibson a vast deal of time and labour, and showed the great ability which he possessed. He should be most happy to communicate to the friends of Dr. Sibson, in Carlisle, the very excellent manner in which he delivered his address, and the display of cordiality with which it had been received.

The resolution was carried by acclamation.

Dr. SIBSON then returned thanks. With respect to the essay, it was a very humble production; he had always felt the truth of the remark, that what one man could do could be done by another, and he believed that all had a talent committed to their care which it was their duty to improve. He expressed how much pride and pleasure it afforded him to belong to so noble an Association, and he identified the commencement of a warm friendship with many of the noblest spirits of the age with the time when he first became a member.

Dr. LYON, of Manchester, then moved, "That Dr. Cooper, of Hull, be requested to deliver the 'Address in Medicine,' at the Anniversary Meeting of 1850."

Mr. SMITH, of Southam, seconded the resolution, and expressed his opinion, from the reputation of Dr. Cooper, they could not have fixed on a more talented individual.

Mr. MARTIN, of Reigate, moved, "That Mr. Wallace, of Hull, be requested to deliver an address on some subject in surgery, at the Anniversary Meeting of 1850."

Mr. CRANG of Timsbury, seconded the resolution, which was carried unanimously.

Mr. TONYBEE, of London, next read a short paper "On Osseous Tumours growing on the walls of the ear and on enlargements of the walls themselves." At its conclusion Dr. Barnes asked him his opinion as to the efficacy of Mr. Yearsley's new medicine for deafness—Glycerine. Mr. Toinbee said it could be of no possible use in osseous tumours. He had made 1,200 dissections of diseases of the ears, and believed that organ to be the

subject of a greater variety of diseases than any other in the human body. In most of these glycerine, or any other lubricating application, could be of no service. The dryness of the tube was only a symptom of the existence of other organic diseases—it was not in itself a cause of deafness.

The evening was concluded by Dr. MALDEN's reading a clever paper on Dreams, pointing out how they might in some cases indicate the presence of disease. The entertainment afforded by the paper was such as to keep the meeting most wakeful, even though the time at which it was read was one in which dreams and slumbers are much more common than anything else.

After which the meeting adjourned at half-past eleven o'clock.

On Thursday morning, at half-past eight, about ninety members breakfasted at the Shirehall.

THIRD GENERAL MEETING.

The members of the Association met this morning shortly after twelve o'clock, in the Natural History Rooms, Dr. Hastings again taking the chair.

Dr. ROBERTSON, of Northampton, moved the following resolution:—

"That a Committee, consisting of the following gentlemen, viz., the President of the Association, Dr. Baron, F.R.S., Mr. Ceely, Dr. John Conolly, and Dr. Forbes, be appointed to correspond and co-operate with the Committee formed, or about to be formed in London, with reference to the erection of a public monument to the illustrious Jenner."

Dr. Heygate, of Derby, seconded the motion, which was carried unanimously.

ADDRESS IN MEDICINE.

Dr. BELL, of Manchester, then proceeded to deliver the Address in Medicine, after which—

Dr. J. CONOLLY, of Hanwell, said he was quite sure that he was only giving utterance to the feeling of every one that had listened to the talented, and only too short address, of Dr. Bell, when he begged to move that the thanks of the meeting be accorded to him for it. A more interesting address had never been delivered to the Association. It embraced matters of the highest possible consideration, and he need not say embodied a great philosophical view, treated with a calmness, a perspicuity, and a felicity belonging only to true genius. Indeed, the subject was treated in such a manner as to shed new lustre on the already illustrious name of Dr. Bell. He was therefore sure that they would all most cordially join with him in the resolution that the thanks of the meeting be given to Dr. Bell, for the very able and eloquent Address that he had just read to them, and that he be requested to allow the same to be printed.

Dr. BLACK, of Bolton, had very great pleasure in seconding the motion, and could fully corroborate what the mover had said. He never, at any one of their meetings, had heard a more profoundly philosophical address, and he only regretted that it had not been in the hands of the Board of Health, before they promulgated the opinions which they had. Indeed he thought after it was printed, they would be doing good

service by presenting that Board with a copy, as it might lead to the rectification of some of the errors committed by that public body. He contended that the Association was bound to assert the dignity of truth and science, against anything like an approach to quackery, which had its foundation in the most miserable ignorance. If such a course had been adopted, and the medical profession consulted, they might then have had something more worthy of the country suggested, and to which the medical press could have given their most cordial assent.

The PRESIDENT, in putting the motion, said there could be but one opinion of it, that it was a most unquestionably excellent address, and worthy of the highest commendation.

Carried by acclamation.

Dr. BELL returned his sincere thanks for the very flattering manner in which they had received the address, and the high compliment they had been pleased to pay him.

ALTERATION OF THE SEVENTH LAW.

The PRESIDENT moved that an alteration should be made in Law VII., of which he had given notice. The alteration was become necessary in consequence of separating the office of Editor and Secretary.

The alteration, which was merely a verbal one, was agreed to.

DEPUTATION FROM THE POOR-LAW MEDICAL CONVENTION.

Mr. LORD, the Honorary Secretary, said that he had the honour of attending before them on behalf of the Poor-Law Medical Convention, and he might be allowed for a moment to call their attention to a resolution which had been entered upon their minute-book after the return of the delegates from the last Anniversary Meeting at Bath. He then proceeded to read the resolution, which was to the effect that the Committee, in making their report, begged to express their unbounded satisfaction at the full, explicit, and unwavering support given to the cause of the Poor-Law Medical Staff by the Provincial Medical and Surgical Association. When he entered the room yesterday he had arrived from the railroad just in time to hear the able address from the President, and he dwelt with peculiar pleasure on his observations,—“We can rejoice and labour for the triumph of social principles and the degradation of all sordid feeling.” There were things mixed up with the administration of the Poor-Law Medical Relief, which were a disgrace to the authorities themselves and sordid to those who act under them. Mr. Lord then went into some details respecting the proceedings of the Convention in endeavouring to bring the subject of the insufficient remuneration of Poor-Law Medical Officers under the attention of the Poor-Law Board, so as to ameliorate their condition. He also alluded to the greatly increased duties of those officers, in consequence of the establishment of the Board of Health and for general sanitary purposes. He then mentioned the circumstance that a memorial had been presented to the Board of Health, and they had been waited on. But

although they saw the injustice with which they were treated, yet they had no power to help them. He then went into a lengthy detail showing the enormous disproportion between the labour performed by those officers and the remuneration they received, and called upon the Association in the name of common justice and humanity, to come to some strong expression of opinion on the subject, which, from an Association of this character, might carry with it such weight as considerably to alleviate the evil complained of.

Dr. COWAN was fully convinced that the claims of the Poor-Law Medical Officers, as a body, had not received that just attention to which they were entitled, he therefore begged to move the following resolution:—

“That this meeting, having again taken into consideration the position of Poor-Law Medical Officers, and dwelt especially upon the additional unrequited duties pressed upon them for sanitary purposes, feel it right *now*, when public attention is directed to the subject, and a disposition manifested to consider the alleged grievances, *again* to memorialize the Poor-Law Board, and petition Parliament to adopt a system of Poor-Law Medical Relief, with regulations relating to sanitary matters, at once *favourable* to the poor, *just* to the medical officers, and *equitable* to the rate-payers.”

Mr. CANTRELL, of Wirksworth, seconded the motion, which was carried unanimously.

SECRET POISONING.

Dr. SIBSON then brought before the meeting a paper received from Dr. Toogood, of Torquay, who was unavoidably absent, respecting the practice of secret poisoning, which had prevailed of late years to a most fearful extent. Having mentioned several cases in which parties had been secretly poisoned, Dr. Sibson moved, on behalf of Dr. Toogood, that a resolution to petition Parliament should be adopted at the present meeting of the Association, which should embrace the following remedy, which Dr. Toogood conceived would totally put an end to so dreadful a practice, or at least, when death from poison did take place, would infallibly lead to the identification of the parties by whom the poison was administered.

Mr. FUGE, of Plymouth, briefly seconded the motion.

The following are the propositions proposed by Dr. Toogood to be embodied in the petition:—

- 1st. That no druggist or shopkeeper be allowed to sell arsenic without a licence, under a penalty.
- 2nd. That no person should be allowed to purchase arsenic under any circumstances, unless accompanied by a witness, and unless he can show cause for requiring it.
- 3rd. That the vendor do keep a book, in which he should make an entry of every such sale, to which the purchaser, and his witness, should affix his name and place of abode, and that this should be attested by the vendor.

Dr. TUNSTALL, of Bath, without wishing to throw any impediment in the way of the motion, thought that the plan laid down by Dr. Toogood would be impracticable, inasmuch as the dispenser of drugs would not only object to keep another book (and so they would have all the chemists in the kingdom

arrayed against them) but it might happen that the master would not be always in his shop, and arsenic might be sold by an apprentice. With regard to bringing a witness, that was no safeguard; for in one very remarkable case—the murder at Bath, a witness was actually taken to the shop; but, were arsenic for rat-poison to be served in such a form as that it could not possibly be mistaken, or introduced into human food without detection, it would be far more likely to meet the evil. What he should suggest was, that the matter should be left in the hands of the President to draw up a petition, and get it presented as emanating from the Association.

The PRESIDENT suggested that a Committee should be formed, consisting of Dr. Sibson, Dr. Tunstall, and Mr. Fuge, who should draw up the draft of a petition, which might be submitted to him for any further suggestions, and then, that such an amended petition should be adopted and forwarded to the proper quarter for presentation.

The suggestion was immediately agreed to, and in course of the day the following petition was drawn up and adopted:—

To the Honourable the House of Commons in Parliament Assembled.

The humble Petition of the President and Members of the Provincial Medical and Surgical Association, assembled at Worcester, on the 2nd of August, 1849. Sheweth,—

That your petitioners view with just alarm the frequency of the crime of secret poisoning, and its increase within the last few years.

That instances have recently been brought to light in which whole families have been destroyed by poison; and that in these instances, after the lapse of years, the presence of arsenic has been discovered by unerring chemical tests.

That more than one-third of the fatal cases of poisoning in England are occasioned by arsenic, and that in the years 1837-8 there were 185 such cases.

That your Petitioners are convinced that some check is necessary to restrict the indiscriminate sale of poisons, and especially of arsenic, so universally known, so easily procured under the most frivolous pretences, and so readily administered: and that this object can never be effected unless Parliament interposes its authority.

And therefore your Petitioners venture to suggest—

That no druggist or shopkeeper be allowed to sell arsenic, without a licence, under a penalty.

That no person be allowed to sell small quantities of arsenic, unless combined with some material, the administration of which with food would be at once detected by the appearance or taste.

That no person should be allowed to purchase arsenic, unless accompanied by a witness.

And that the vendor do keep a book, in which he should make an entry of every sale of arsenic, to which the purchaser and his witness should affix his name and place of abode, and that this should be attested by the vendor.

And your Petitioners will ever pray.

FRANCIS SIBSON.
JOHN BATE FUGE.
JAMES TUNSTALL.

Mr. MARTIN, of Reigate, then said that a requisition from Hull had been received, signed by upwards of 100 professional and other gentlemen, inviting the Association to hold their next Anniversary Meeting in that town. They had as yet never been there, and he believed a great number of the members of the Association had expressed a wish to hold the Anniversary there. Subsequently to receiving that invitation, it had been suggested by some members of the Association that a meeting at Brighton would be very desirable, but they did not then know that such an invitation had been received. He therefore had great pleasure in moving,—

“That the Anniversary Meeting in 1850 take place at Hull, and that F. R. Horner, M.D., of Hull, be appointed President-elect.”

Dr. C. R. HALL, of Holmes Chapel, seconded the resolution, which was agreed to.

COMMUNICATIONS.

The three following cases were then read by Mr. NIVEN, of Pershore:—

The first case to which I shall direct your attention is of a very interesting description, wherein one of the most important functions of the animal economy was carried on in the absence of the organs or parenchymatous structure especially adapted to that purpose.

Extensive Disease of both Kidneys without loss of Function.

Miss H., aged 68, spare, and of very regular habits, had been frequently under my care, and that of my predecessor, for renal affections, and gastric derangement.

On February 10th, 1847, I was requested to see her. I found her suffering from a violent rigor, amounting almost to a convulsive action of the entire muscular system; pulse small and weak; extremities cold. There was some catharsis, with slight colicky pains; she also complained of occasional nausea. Some hot brandy-and-water, with a few drops of laudanum, and heat to the extremities, considerably relieved her. For a few days she sensibly improved, when the alvine discharges returned, accompanied by frequent vomitings, of a dark, grumous, semi-fluid matter; the dejections also were nearly black. Pulse was then 86, and felt natural; the tongue much loaded, with complete anorexia. She complained of no pain; urine passes naturally, and is healthy in appearance; there is no tenderness in either lumbar region; the skin feels harsh and dry. Matters continued in this state for about a week, the symptoms varying only in degree. Slight pyrexia now came on, the dejections became less frequent, but the same in appearance; there was also some tendency to lethargy, and partial catalepsy of the left arm; the levator muscle of the left eyelid was also slightly paralyzed. She gradually became more comatose, and remained in a state of “living death” for another fortnight, when she sank; during this latter period the urine was passed in small quantities, and at intervals of two or three days.

With some difficulty I obtained leave to have an inspection of the body; and, it being expressly stipulated with me that it should be mutilated as little as possible, I, assisted by an intelligent pupil, directed.

my attention at once to that portion of it which I deemed most likely to throw some light on the nature of the disease, namely, the abdomen. *Stomach*: This organ contained a quantity of dark fluid, the same in appearance as that which she had vomited. Its coats were somewhat thickened, and its internal or mucous surface—as well as that of the duodenum and a portion of the jejunum was marked by patches of chronic inflammation. *Liver*: The inferior surface of this organ adhered extensively to the stomach and duodenum; in colour it was paler than usual, and felt softer and more pliant than in the healthy state; when cut into a few isolated whitish tubercles presented themselves, but the mass of the organ was peculiarly soft, feeling more like the spleen than the liver—a state produced according to Baillie by the interstitial absorption described by John Hunter. From the cut surfaces a yellowish fluid escaped in great abundance; the section of the branches of the vena porta, did not present the elastic and permanently open state usually found, but its coats were thin and immediately collapsed. *Kidneys*: On feeling for these bodies, I found, instead of the firm and solid sensation usually conveyed by them, a large fluctuating tumour in the situation of each. One of these was carefully dissected, and shall be handed round for your inspection, and the other was examined *in situ*; they exactly corresponded in appearance, and consisted each of a sac filled with urine. *Not a vestige of the substance of the gland in either side was left.* In the situation of the pelvis was a sac, occupied by a calculus, exactly moulded to the form of that cavity. The ureter and vessels occupied their usual situation.

What constitutes the remarkable and peculiarly interesting character of the above case, is the fact of a vital function being carried on in the *total absence* of the organ specially intended for that purpose; for, although, during the last few days of life the secretion of urine was arrested or greatly impeded, as indicated by the deep coma, or urinary apoplexy which preceded dissolution, still the above structural changes were not of a few days, or weeks, or even month's duration.

Dr. Hastings, who saw the preparation soon after it was made, suggested that the internal surface of the sac must have been a urine-secreting surface,—a circumstance rendered probable by the fact of the renal arteries, which were of their usual size, ramifying in the substance of the sac.

The next case which I have to report is one of small-pox occurring in the fetus, the mother having escaped the disease.

Congenital Small-pox, not affecting the Mother.

March 15, 1847. Mrs. H. confined of a female child, on whose body were several well-marked pustules identical with those of small-pox. This disease was prevailing in the neighbourhood at the time. The lady's eldest child and one of the domestics having had it just before, and her husband, subsequent to, her confinement. The only peculiarity in the eruption, and certainly a very curious one, was, that it was in different stages of maturation. Some of the pustules, which were generally small, being full of lymph, whilst others had shrivelled up, and had almost disappeared. There was also, as you will understand, no blackening; this,

of course, arose from the absence of atmospheric air. As already mentioned, the mother did not take the disease; she had been vaccinated.

The next case of interest which I shall notice is an obstetric one.

Ventral Hernia During Labour.

February, 1846. I was called to attend Mrs. B., in child-bed. When I arrived, I found the child's head born. The labour terminated in the usual manner. The pains were represented to have been severe prior to my arrival. In the course of the day, (she had been confined in the morning,) she complained of some pain and uneasiness in the umbilical and hypogastric regions, which I imputed to "after-pains." Her pulse was natural, and in every other respect she appeared going on well.

At my next visit, on the second day from her confinement, I found she had passed a bad night, and the nurse requested that I should examine the abdomen whilst the patient was sitting up in bed, remarking that she never before had seen any one with the same appearances there. Before raising her, I carefully examined the abdominal region, and, with the exception of a very slight degree of tenderness, I could detect nothing unusual there. I now had her raised to the sitting posture, and the moment she was lifted up a tumour, about the size and shape of a French roll, appeared in the situation of the linea alba; and, on being again laid on her back, this anomalous appearance went quite off. This was evidently a case of abdominal rupture along the course of the linea alba or junction of the recti muscles, and the separation extended from the scrobiculus cordis to the symphysis pubis. My friend Mr. Francis, to whom I shewed the case, could distinctly trace at the latter place the separated edges of the tendons. A padded and properly-adjusted bandage effected a cure.

Mr. HARE, of London, read a paper on "Certain Physiological Facts observed during the Treatment of Spinal Deformity; and on Recumbency as a remedy in certain Diseases."

Dr. PAXTON, of Rugby, communicated some observations on "Chromatic Affections of the Skin," illustrated by coloured drawings; followed by a case of "Hypertrophy of the Spleen," by Dr. Topham, of Wolverhampton.

The following resolutions were then passed:—

Moved by Mr. Cantrell, of Wirksworth, and seconded by Mr. Hunt, of London.

"That the thanks of this meeting are due, and are hereby given, to those gentlemen who have read papers and presented communications at this meeting."

Moved by Dr. Burrows, of London, and seconded by Mr. Paget, of Leicester.

"That the thanks of the meeting be given to the Mayor, Magistrates, and Citizens of this city, for the kindness and liberality with which they have received the Association; also to Sir John Pakington, Bart., and the Magistrates of the county, for the use of their Shirehall; and to the Council of the Worcestershire Natural History Society, for the use of their rooms during the meeting."

The President having left the chair, which was taken by Mr. Pierpoint, it was then moved by Mr. Soden, of Sunbury, and seconded by Mr. Newnham, of Farnham,—

“That the thanks of this meeting be given to Dr. Hastings, for the able manner in which he has conducted the business at this Anniversary.”

THE DINNER.

The members of the Association and their friends dined together in the evening at the Guildhall, under the Presidency of Dr. Hastings, who was supported on his right by the High Sheriff of Worcestershire (J. Dent, Esq.), Lord Lyttelton (the Lord-Lieutenant), the Very Rev. the Dean, the Hon. W. Coventry, Sir J. Pakington, Bart., M.P., Sir E. H. Lechmere, Bart., Dr. J. Conolly, &c., &c.; and on his left by the Mayor of Worcester (R. Padmore, Esq.), O. Ricardo, Esq., M.P., the Rev. Canon Cradock, Capt. Rushout, M.P., J. W. Isaac, Esq., and George Norman, Esq., of Bath. The Secretary of the Association, J. P. Sheppard, Esq., occupied the Vice-chair. Most of the members of the Association who had attended the other meetings were present, and also a large number of gentlemen of Worcester unconnected with the profession. The company numbered about 130.

After the removal of the cloth, the Dean having returned thanks, *Non Nobis Domine* was sung by some of the gentlemen belonging to the Cathedral choir, who also at intervals enlivened the company with several excellent glees, sung with much good taste.

The CHAIRMAN then rose and gave “The Queen,” the first lady in the land, and the first lady in the world; a Sovereign on whose dominions the sun never sets,—a Sovereign who knows how to value the free institutions of her subjects,—and a Sovereign who, by reigning in their hearts, reigns supreme. He would give them—“Victoria of England, Victoria our Queen,” long might she live over this great nation, and happy and glorious might that reign be. The times were of so peculiar a character, that when he looked upon our own tranquil country, and contrasted its condition with the disturbed state of other nations, he could not but call upon them to respond to the toast with the utmost enthusiasm.

The toast was drunk with all the honors.

Glee—“Victoria the Rose.”

The CHAIRMAN next gave “The Queen Dowager, Prince Albert, and the rest of the Royal Family,” which was drunk with three times three, after which the Chairman announced he would call for no more cheers throughout the evening.

Dr. JOHN CONOLLY, of Hanwell, then rose and said he had no doubt that the greater part of this honourable company would be somewhat surprised, indulgent as they always were to him when he had the honour to address them, that he had taken the liberty of doing so at this very early period of the evening. He had, however, consented to do so at the wish of the members of the Council, who had done him the very great honour to request him to break through the formalities of the list of toasts on the present occasion, in order

to bring one especially before their notice. He was sure that it would afford to the members of the Association, and to the noble, reverend, and distinguished visitors present, the utmost gratification to drink the toast which he was about to propose. He doubted not also that their reverend and noble visitors would, on the present occasion, willingly waive the precedence due to themselves when he named the gentleman, who, as far as the Association was concerned, was undoubtedly entitled to occupy the first place in their esteem and respect; when he named their respected President, Dr. Hastings. (Loud and continued cheering.) Well indeed might Dr. Hastings indulge the feelings of a just pride on the present occasion, for never at all their meetings had there been so large and enthusiastic a company assembled together as he viewed on the present occasion, which had tended to make this one of the happiest gatherings of the Association throughout the whole course of its 17 years' existence. Then, if they looked round to see of what that meeting was composed, how many estimable physicians, how many philosophers, how many philanthropists, how many eminent men of science, and above all how many dear friends Dr. Hastings had been the means of bringing together at this their Anniversary Meeting. And this feeling must be increased when it was recollected for how long a period of friendship with one another they were indebted to their President. Dr. Hastings had been instrumental in keeping this large Association, now amounting to nearly 2000 members, closely united for the long period of 17 years by the blessed bond of peace; for he believed that never was an Association so large, so scattered, and consisting of so many individuals whose interests so frequently clashed with those of each other, kept so long in the bonds of peace and amity. (Cheers.) Dr. Hastings, as a member of the Association, was a man dear to them all. He was dear to them also as a physician, and dearer to them as a benevolent and good man in all the private relations of life. (Cheers.) It was delightful to him to be able to say this, but he had the easier task to speak of him rather as a private individual than the President of their Association. He remembered at the celebrated University of Edinburgh, where he (Dr. Conolly) had the honour of being educated very shortly after Dr. Hastings had left there, to have heard their President always spoken most highly of; he left Edinburgh with such a reputation as few men had acquired before him, and none had surpassed, and since then, during the long period of upwards of a quarter of a century, he (Dr. Conolly) had known their President, and could bear ample testimony to the many good qualities of his heart, his uniform kindness, generosity, and liberality. (Cheers.) In fact, his whole course of life seemed to have consisted in steps—one good leading to another—one great object to another; and he never missed the opportunity of advancing science and increasing knowledge. He (Dr. Conolly) hoped and trusted that the company he saw around him would not imagine that he was labouring to confer an undeserved eulogy upon Dr. Hastings, for he did assure them that he should be

ashamed to speak in that manner if they were not the real sentiments of his heart. (Cheers.) Well, then, there they were, once more in this changing—ever-changing life, assembled once more to celebrate their anniversary for the seventeenth time, and although, in looking around him, he saw that seventeen winters had scattered some grey hairs upon their heads, yet seventeen summers had nourished their hearts, and ripened many a warm personal friendship which dated its existence from the time they first met. (Cheers.) And although they could not all expect that seventeen years would still find them assembled again around that festive board, yet, if good wishes could prolong life, their worthy President's would be continued throughout many more of its anniversaries. His most cordial wish was, that as he grew older, year by year, comfort, honour, happiness might gather around him and his family, until he received that reward which faith told us would always be the reward of a good man after a life well spent. He would therefore propose to them the health of their dear friend Dr. Hastings, and might every blessing rest upon him. (Tremendous cheering, after which the toast was drunk with the greatest display of cordiality and enthusiasm.)

Dr. HASTINGS, on rising to return thanks, was again greeted with cheers. He (Dr. Hastings) thanked them all from the very bottom of his heart for the most distinguished honour which they had that day done him. He felt sincerely indebted to his friend Dr. Conolly for having thought so little of the number of imperfections which must have been made apparent during the last seventeen years, and for having thought so much of the few slight efforts which he had been enabled to devote to their service in the advancement of this noble Association. They had tried a great experiment, and he was happy to say that that experiment had been crowned with the most perfect success. (Cheers.) Not only had this Association become known and its advantages appreciated throughout all the provinces of this mighty empire, but it had become known throughout Europe and America, and its objects and the efforts it had made for the advancement of medical science had been both felt and acknowledged. (Cheers.) It was indeed a proud recollection that he had assisted in the foundation of such an Association. It had brought him into immediate contact with the best of men, and some of the greatest physicians, and had been the means of creating and fostering friendships which would continue to the latest day of his life. (Cheers.) As long therefore as he had health and strength spared to him he should continue to promote its welfare, and feel the deepest interest in its success. The success of the Association was to be attributed to the united efforts of the medical profession, and he should be ashamed of himself if he did not upon that occasion acknowledge that to the medical profession of the city of Worcester he owed a debt of gratitude which could never be effaced. (Cheers.) He assured them that his heart beat high with expectation as to the future success of the Association. He thought they might rely on the hope that this was only a beginning, and the Association would go on until it

had realised the great principle and objects of its constitution—the entire alleviation of the sufferings of humanity. (Cheers.) They had no selfish end in view; the end to which they looked was the advancement of medical knowledge, and relieving the sufferings of mankind; those were the objects for which they were associated, and those objects would recommend their Association, not only to the noble and reverend visitors who had that day assembled to assist at the celebration of their Anniversary, but to every friend of the human race. (Cheers.) He begged to tender them his best thanks for their kindness in drinking his health, and also to Dr. Conolly for proposing it in the manner he had done. They had been tenderly attached for many years, and that gentleman was always ready to assist him with his advice and experience, and therefore on that occasion their toast became doubly acceptable to him from having been proposed by a sincere friend, and one who was deeply respected by all who knew him. (Dr. Hastings resumed his seat amidst enthusiastic cheering.)

Glee—"Glorious Apollo."

The PRESIDENT then gave "The defences of our liberties, and the protection of our property—the Army and Navy."

Captain RUSHOUT briefly acknowledged the compliment, regretting it had fallen into the hands of a person so unworthy as himself.

The CHAIRMAN next proposed the "Bishop, the Dean and Chapter, and Clergy of the Diocese." He remarked that they should have had the greatest pleasure in seeing the Bishop there that day, but he was unfortunately obliged to be absent on matters of business. The Very Rev. the Dean, however, had most kindly honoured them with his presence, and had by so doing shewn the respect that he bore to the Association, and his earnest desire that it might flourish. (Cheers.) Indeed the Association possessed an object in common with that of the Church. The clergyman and the medical professor both met in the chamber of sickness, and at the bed of death, although the functions of the clergy were superior to theirs, inasmuch as when all aid from man was in vain, they were able to give consolation and impart hope to the mind of the sinner. He should not on the present occasion say one word in vindication of the medical profession from the charge that had been thrown out against it,—namely, that of infidelity; he would only give a flat denial to the foul slander; but he would remark, in addition to what he had already said, that the clergy had afforded the most valuable aid to the medical profession, for they were the depositories of all the medical science and learning, at a time when but for them the whole of the knowledge which had come down from the Greek, the Arabic, and the Roman physicians, would have been irrevocably and utterly lost to the world. Therefore the profession owed to them a debt of gratitude, which they most willingly discharged. They were here, too, that night, to shew their desire that useful knowledge should flourish; and he would add, particularly with reference to the Dean, whom he would take the liberty of calling his friend, ever since he had

come into this diocese, he had shewn himself ready at all times to advance the progress of useful knowledge. (Cheers.) They had all witnessed the beautiful Museum of the Natural History Society, which was an ornament to the city, and he was sure they would be highly gratified to hear that the Rev. the Dean had been one of its first presidents, and one of its most liberal supporters. (Cheers.) On these and all other grounds the Dean was well worthy of the highest encomiums, and nothing afforded him (Dr. Hastings) greater pleasure than thus publicly to propose his health. (Drank with applause.)

The DEAN acknowledged the toast, and expressed the great pleasure which he was sure the Bishop would receive at the very kind manner in which the toast had been proposed. For himself he thanked them most heartily, and thankfully acknowledged the assistance of the medical profession in the sick chamber, which, by soothing the bodily pain of the afflicted, enabled them to receive with attention the consolation of the ministers of religion, and to fix their minds upon the undying promises of the glorious Gospel of our Lord, so that their last feelings might be those of hope, and their last faltering accents prayer. (Applause.)

Glee—"Hail Smiling Morn."

The CHAIRMAN then gave "The first Civil Officer in this county and the representative of her Majesty, the High Sheriff, John Dent, Esq." After a long life of honourable actions, by which he had gained the utmost confidence and respect of his fellow citizens, he had been elected to that distinguished post which he so well deserved. (Loud cheers.)

The HIGH SHERIFF returned thanks. Nothing gave him more pleasure than to see around him so many eminent and scientific gentlemen. He appreciated their labours, and bore testimony to the unvarying urbanity and distinguished talent of their worthy President, whom he sincerely hoped might live to preside at another Anniversary 17 years hence. (Cheers.)

The CHAIRMAN then gave "The Mayor and Corporation of the city of Worcester." (Cheers.) When it was announced that the Association had determined upon meeting in this city, the Mayor, Corporation, and the whole of the citizens had expressed their utmost pleasure. He would recommend the Mayor, (R. Padmore, Esq.,) to the notice of his medical friends on other grounds. He was a most strenuous advocate for the extension of knowledge, and he had, only a very short time ago, offered a prize to the working classes of the midland counties for the best essay on the advancement of useful knowledge. (Great applause.)

The MAYOR, in a brief, but very appropriate speech, acknowledged the toast, assuring the Association that he was most happy to be the humble instrument of promoting the acquisition and dissemination of knowledge and science.

The CHAIRMAN then rose to propose the health of "The Lord-Lieutenant of the County" (Lord Lyttelton.) (Tremendous cheering.) He was not surprised to hear those hearty cheers from all parts of the room. The noble house of Lyttelton had long been connected with the brightest part of the constitutional history of this

great empire, and although they might not know it as well as he did, the present Lord well illustrated, and reflected additional lustre on, the name of that ancient and noble house. (Cheers.) Indeed they had no conception of the manner in which his Lordship had given his energies to the advancement of knowledge in this county, and he was sure that they would all express a hope that he might continue long to live an ornament and honour to the county. (Loud cheers.)

The LORD-LIEUTENANT begged to return his most sincere thanks to them for the distinguished honour they had done him. It was an honour indeed which in that room, and on subjects of interest connected with the county of Worcestershire, he had not been unaccustomed to receive; but he acknowledged that he had no such claim to a mark of respect from a Society, the objects of which were not of local but national interest, and whose members belonged not only to this county, but to all parts of the United Kingdom. (Applause.) Still he could not but feel a very great degree of pride and satisfaction when he considered that this was not an ordinary meeting of the Association, but was held in what might be called the birth-place of the Association, (cheers,) and under the presidency of him who, if he rightly understood, might be considered its founder. (Loud cheers.) Such a society was of incalculable importance to the medical science and literature of this country; and although, of course, he could not be expected to be familiar with the details of that science, yet he trusted he had a due sense of its importance as regarded the welfare of the human race. (Cheers.) He alluded to his connection with the Queen's Hospital, at Birmingham, concluding an able address by eulogising this Association; and expressing his opinion that it was the first of the kind which had set the example of forming societies for the advancement of knowledge and practical science throughout the kingdom. (Cheers.) He again thanked them for the honour they had bestowed upon him, and in return expressed a wish that the Provincial Medical and Surgical Association might go on flourishing continually. (The Noble Lord resumed his seat amidst loud cheers.)

The CHAIRMAN then gave "The health of the Members for the County and City of Worcester," coupling with the toast the names of Capt. Rushout and O. Ricardo, Esq., and calling their attention to a petition which had been adopted at one of their general meetings held yesterday, relative to providing some measures to put a stop to the practice of secret poisoning.

Capt. RUSHOUT, in returning thanks, expressed his intention of doing everything in his power to put a stop to so baneful a practice as that mentioned by the President, and congratulated the city of Worcester on having seen the second visit of so learned, so scientific, and so useful an Association as the Provincial Medical and Surgical Association, after a lapse of seventeen years.

Mr. RICARDO also expressed his opinion that it must be a source of great gratification, both to the city of Worcester, to whom it was an honour, and to its President, Dr. Hastings, to witness the success of so noble and glorious an Association as that, the Anniversary of which they were now celebrating.

Madrigal—"Spring's Delights."

The CHAIRMAN then gave "Sir John Somerset Pakington, the Chairman of the Quarter Sessions, and the Magistrates of the county." (Cheers.) He remarked that it was to that distinguished body that they were indebted on the present occasion for having had the liberty to meet in the noble hall in which they had breakfasted that morning, and it was a proof of the urbanity of the Magistrates and their good feeling towards the Association as a body, that they had so willingly accorded to them its use. (Cheers.) Sir J. Pakington was not only entitled to their respect for his devotion to learning and science and the noble way in which he discharged the onerous public duties devolving upon him; but he had a particular claim upon the Association from the fact that he derived his origin from one of the greatest ornaments of surgery that ever lived. (Cheers.) And although Sir John's name might be only known to his medical friends by reason of his public duties, yet, when he mentioned the name of William Russell—(Cheers)—so well known for his distinguished ability, not only throughout this city and county, but to the profession generally, and who was no less famed for his generosity than his talents,—(Cheers.)—they would agree with him that his descendant, apart from any striking qualities of his own, was worthy of a mark of respect from such an Association as the present. (Cheers.) He therefore begged to propose the health of "Sir J. Pakington and the rest of the County Magistracy."

Sir JOHN PAKINGTON, Bart., M.P., begged to tender them his most sincere thanks for the compliment which they had been pleased to confer upon that body of gentlemen—the County Magistrates—over whom he had so long had the honour of presiding; and he would also express his own very grateful thanks to Dr. Hastings, their worthy President, for the only too flattering manner in which he had coupled his name with the toast. (Cheers.) Dr. Hastings had adverted in terms of unnecessary gratitude to the fact of the County Hall having been offered for the use of the Association. He thought they were not entitled to any expression of gratitude on that account, for they were only too proud of its having been devoted to so useful a purpose as the accommodation of such an Association. (Cheers.) They, as Magistrates of the county, were bound to recollect that the building was erected at the public expense, and although more immediately destined for certain local purposes, yet they best consulted their own real duty when they permitted it to be used for any useful public object, and they would allow him to add, he thought they could not devote it to a more courteous or useful purpose than for the accommodation of the Association on occasions like the present. (Cheers.) He should now proceed with their permission, and at the request of the President, to propose to them a toast. The respect he bore to their worthy President, and the respect he owed to so admirable an Association forbade him to decline the duty they had been pleased to impose upon him; but he must at the same time assure them that, standing as he did in the midst of so

many gentlemen who had achieved for themselves so much eminence by their professional and scientific acquirements, he did sincerely feel that he had no qualification whatever which fitted him to propose to them the toast which he was about to name further than the sincerity of purpose with which he should recommend it to their attention. (Applause.) The toast which had been placed in his hands was "Prosperity to the Provincial Medical and Surgical Association." (Loud cheers.) He felt that it would be great presumption on his part to detain them at any length upon points with which they were far more conversant than himself, but they would permit him to express to them his admiration of the manner in which the Association had been conducted, and also the satisfaction he felt at the great and general prosperity to which it had attained. (Cheers.) They were aware that by their researches into chemistry and general knowledge the science of agriculture had been greatly promoted by Associations of this description. He thought also, much good was effected by periodical meetings like the present, where the members of the Association from the most eminent, down to the most humble individual of the profession might meet together as brethren, and talk over the results of their past experience, and he would also congratulate the Society that it was ever to be found foremost in the march of intellect, science, and truth; for, as his Noble Friend (Lord Lyttelton) had said, other Societies had rather followed the example of the Provincial Medical and Surgical Association than set any example to it. The members of a profession so extensive as that of medicine, from its very nature were necessarily confined to particular localities situated all over the kingdom, and formerly, it was only at the greatest possible inconvenience that they could have personal communication with each other, and thus derive the benefits which must result from bringing a vast amount of local experience into one focus; but now he was at liberty fairly and sincerely to congratulate them on having, by the formation of this Association, completely overcome that difficulty, and in the most eminent degree changed the aspect of affairs;—(Cheers)—for, not only did they have an annual gathering or anniversary every year, and publish their *Transactions*, but they had also established a most valuable periodical in the *Journal*, which was widely circulated; and, as his friend Dr. Hastings had well said, not only throughout England were their proceedings known, but through Europe and America. He did most sincerely congratulate the Association on such a state of affairs, and there was one circumstance which induced him to take the warmest personal interest in all their transactions, and in the continuance of their prosperity. (Cheers.) Dr. Hastings had alluded to his being descended from a man of great eminence in the medical profession, and it was a circumstance in which he felt a just pride. (Cheers.) But there was another circumstance which added to his pleasurable feelings on the present occasion, and that was the circumstance that they were assembled there under the Presidency of his friend Dr. Hastings, who might be regarded as the founder of that Society which seventeen

years ago consisted only of some 60 persons, but which could now boast of nearly 2,000 members. The benefits of the Society he hoped and trusted would continue to increase, and long, he hoped, might Dr. Hastings live to enjoy the reflection of the good he had effected, and to witness the still more extended usefulness and operation of the Association. (Cheers.) It was thus, that under the blessing of God, and by the energy of individuals, that all the noble institutions of the country had flourished, and, as had been said by a noble friend, it was by the combined and vigorous efforts of Englishmen in such Associations as these that the country had achieved its high distinction, and taken its proud position among the nations of the earth. (Tremendous cheering.) He sincerely hoped that the medical profession of this country would long continue in the enjoyment of the preeminence they now possessed, and that there would also be a long continuance of the prosperity of the Provincial Medical and Surgical Association. (Loud cheers, in the midst of which the Hon. Member resumed his seat.) The toast was drunk with the utmost enthusiasm.

The CHAIRMAN then gave "the health of G. Norman, Esq.," who briefly returned thanks, congratulating the Association on the very auspicious recurrence of that day when, after a lapse of 17 years, they had again the honour of holding their Anniversary once more in the city of its birth. He also expressed the pleasure it afforded him to see the noble and reverend of the land countenancing the Association by their presence on that occasion.

The health of the "Vice-Presidents" was then given from the Chair, and acknowledged by Dr. Robertson, of Northampton, as the senior of the Vice-Presidents, who said he had been in the habit of attending the Anniversaries of the Association, and was proud to say he had never witnessed one attended with greater success. (Cheers.)

The CHAIRMAN then gave "Success to the Benevolent Fund," coupling with the toast the name of Mr. Newnham, of Farnham, who had been of such signal service in relation to that fund, and whose whole energies were devoted to the noble purpose of relieving afflicted humanity. (Loud cheers.)

Mr. NEWNHAM expressed his deep sense of the kindness and honour done to him for doing, what was really no more than his duty. God had given to every man certain talents, which it was his duty to improve, and though he was free to confess he felt a pleasure in promoting the objects of the Benevolent Fund, yet he sighed to reflect upon how little he had been able to accomplish in the noble cause of charity.

The Very Rev. the DEAN then proposed "Success to the Medical Charities of the city," coupling with the toast the health of Dr. Malden, who had always been foremost to promote the whole of the charitable institutions of the city, particularly medical charities. He also paid a well-deserved compliment to the whole of the profession for the unceasing exertions to alleviate the sufferings, and soothe the sorrows of the poor persons who came under their care at those institutions.

Dr. MALDEN, on rising to return thanks, was received

with much cheering. He said that, to have his health proposed in such an assembly at all, was most highly gratifying, but to have it proposed in so kind a manner by the Rev. Dean, in connection with such a toast, and to have it received with such a degree of enthusiasm, was indeed too high an honour for any person who stood in so humble a position in the profession as himself. (Applause.) But their worthy and excellent Dean had thought fit to pay him a compliment, for which he most sincerely thanked him. That worthy and benevolent gentleman it was well known, both throughout the city and county, had taken the deepest interest in everything relating to the alleviation of human woe, and deserved the deepest thanks, not only of every member of the profession, but of the public at large, for his very numerous and beneficial acts of charity. (Loud cheers.) He congratulated the Association upon the proud position to which it had that day attained, and concluded by wishing it continued prosperity, and again thanking them for the unexpected honour they had conferred upon him.

The CHAIRMAN then gave "The Royal College of Physicians, the Royal College of Surgeons, and the Worshipful Company of Apothecaries," three toasts which the lateness of the hour compelled him to combine. In connection with these toasts, he mentioned the name of Dr. Burrows, of London.

Dr. BURROWS said, that in the name of the Fellows and Members of the Royal College of Physicians of London, who had the good fortune to be present at the meeting, and also the absent members of that body, he begged to return his cordial thanks for the compliment they had paid to those learned bodies on the present occasion, and he was perfectly sure that when he mentioned that the toast had been drunk at this Anniversary, it would afford every member the highest gratification. (Cheers.)

The CHAIRMAN then gave "The health of the Secretary, J. P. Sheppard, Esq.," who had been connected with the Association from its first commencement. (Cheers.) In proposing the toast the President alluded in touching terms to the circumstance which had deprived the Association of the services of their former most lamented and able Secretary, which rendered it necessary to make a fresh appointment. He spoke most highly of the subject of the toast, and said that throughout the whole of his life he had ever found him to be a "Gentle Shepherd." (Cheers and laughter.)

Mr. SHEPPARD returned thanks for the very kind manner in which Dr. Hastings had proposed his health, and said that so long as health and strength were spared to him he would ever be found at his post, and occupied in the discharge of his duty. (Cheers.)

Dr. COWAN proposed "the health of the Medical Profession at Worcester," a toast without drinking which they could not have parted from this ancient and hospitable city. He therefore took advantage of the present occasion to express his sense of the kindness and liberality of treatment which the members of the Association had received at the hands of their professional brethren residing in Worcester; and he begged to couple with the toast the name of Mr. Pierpoint.

Mr. PIERPOINT acknowledged the compliment, and in his turn thanked the Association for their complaisance in acceding to the request of the profession resident here, that they would hold the present Anniversary in this city.

The CHAIRMAN then gave "Success to the Metropolitan and Provincial Medical Schools," coupling with the toast the name of Mr. Paget, who replied at some length, vindicating the London Schools from some charges that had been brought against them relative to the effect of their teaching.

The CHAIRMAN then proposed "The Medical Press" in very complimentary terms, coupling with it the health of Dr. Ranking, the Foreign Editor of the *Journal*, and alluded to the inestimable loss they had sustained in the demise of Dr. Streeten.

Dr. RANKING, in returning thanks, alluded to the same painful subject. He urged upon the Members of the Association the necessity of sending communications to the *Journal*, and expressed his opinion that if such a course was pursued by the Members they should be able to produce a medical publication second to none in the kingdom.

Dr. MALDEN then, in a humorous speech, proposed "the health of Dr. Forbes," which was replied to by that gentleman; "The Committee of Management," and "Dr. P. H. Williams" followed. The Chairman then left the chair, it being beyond midnight, and the Company shortly afterwards separated, all expressing how much pleasure they had felt at the manner in which the Anniversary Meeting of 1849 had gone off.

LANCASHIRE AND CHESHIRE BRANCH MEETING.

The following communications formed part of the proceedings at the Thirteenth Anniversary Meeting of the Lancashire and Cheshire Branch, held June 28th, 1849: Sir Arnold Knight, M.D., in the Chair.

CASE OF SEROUS EFFUSION INTO THE VENTRICLES OF THE BRAIN.

Mr. Dorrington brought before the meeting the dura mater of a boy, aged 12, who died after two years' illness, of serous effusion into the ventricles of the brain. He had for a long time suffered from complete amaurosis, which depended upon the absorption of the optic nerves at their decussation, under the influence of pressure produced by the effused fluid. The principal point of interest in the case was that the inner surface of the dura mater was covered with small pieces of bony deposit, varying in size from a split pea to a very small pin's head, and in great number. These seemed to be developed, partly immediately under the arachnoid and on the inner surface of the dura mater, and partly between the fibres of the latter structure. Upon detaching some of these deposits, grinding them down into very thin laminæ, and submitting them to the microscope, Mr. Dorrington discovered that they presented the microscopic characters of true bone, containing lacunæ with their canalicular,

and attempts at the formation of Haversian canals. Mr. Dorrington demonstrated this fact to the meeting by means of the microscope. Mr. Dorrington and Mr. W. C. Williamson, who has paid much attention to this subject, then made some remarks on the important bearing which the existence of true bony deposits in such a situation had upon the disputed question as to the mode in which bone is formed. They considered that the preparation strongly confirmed Dr. Sharpey's views as to the frequency of bone being formed without the previous intervention of cartilage.

HYSTERIC CONVULSIONS.

Mr. C. Williamson communicated an abstract of a peculiar case of hysteric convulsions of long continuance, and in which a succession of very violent symptoms were presented. Periodical attacks of violent convulsive jactitation returning each evening, hysteric vomiting, syncope, dysuria, hemiplegia, &c., followed each other in succession, during a period of fifteen or sixteen years. The case was relieved by the use of anodynes, and the abstraction of small quantities of blood from the spine, and ultimately almost cured by change to a milder climate.

TREATMENT OF SPINAL IRRITATION BY SHAMPOOING.

Mr. Sharpe related the following case:—

April 14th, 1837. Miss A., 35 years of age, about five years ago complained of feebleness after walking, pain in the cervical and lumbar vertebræ, a troublesome cough, and pain in her side, which continued so long, that her friends feared consumption.

Upon her medical attendant examining the spine, he found great tenderness in the lower cervical, and in the lumbar vertebræ, for which leeches, issues, &c., were directed from time to time, and the horizontal posture, for twelve months, but without benefit. After this she was confined to bed for nearly three years, during which time the menstrual discharge had entirely ceased. She had the best medical advice in London and elsewhere.

Having heard of the benefit of shampooing, she determined to try its effects, and placed herself under the care of a shampooer in the north. At this time the tenderness had extended along the whole length of the spine, and she was unable to stand, the limbs being too feeble to support the weight of the body.

The plan of treatment pursued was shampooing the whole body for one hour, morning and evening, with a stimulating embrocation, a vapour bath once in ten days or a fortnight, and a generous diet, with porter.

Having very little appetite when she commenced shampooing, and as animal food always produced uneasiness in the stomach, she began by taking only a small quantity, increasing it by degrees, with the porter, until she took four half-pints of porter per day.

In two months she was placed on her feet, supported on each side by two assistants, whilst her feet were moved by another. This was now done daily. In two months more the menstrual discharge returned, and at the end of this time she was able to walk alone. At the end of six months from the beginning she

reported herself to be quite well. At the end of twelve months, when I again saw her, she said that she had walked six miles a few days before, and that her back was the strongest part of the body.

I do not know the composition of the embrocation used, but believe it to be one of Ol. Cajep. Liq. Ammon. Sp. Comp., Tereb. and Ol.

I should have mentioned that the recumbent posture was enforced for a considerable portion of the day, using exercise occasionally when the atmosphere was dry, as a moist air appeared to interfere with her improvement.

This was not a case under my own care, but having seen the lady several times during her illness (not professionally,) and having seen her since her recovery, quite well as she has stated, I took the hint from this case, and have pursued a like plan of treatment for the last twelve years with great success, in cases where there has been spinal irritation, arising at first probably from nervous irritation, produced by the reflex action of the nervous system. This continuing for some time, I suspect congestion within the theca vertebralis takes place, and chronic inflammatory action follows, probably of the arachnoid membrane, with occasionally effusion within this membrane, for in the case of a young lady under my care there was a complete loss of power in the sensitive, as well as the motor nerves, for many months, and the skin of the patient might be forcibly pinched or pricked with a pin without her feeling or being aware of it.

Both feeling and motion were restored by the above means, with the addition of the use of iodine, and the electro-galvanic apparatus. The young lady is now quite well, and enabled to perform the active duties of life, and join in the recreations of society.

I need not to add that the strictest attention is paid to any first exciting cause of spinal irritation, as also to the general health, during the whole time the patient is under treatment.

Mr. Wood, of King Street, Manchester, exhibited the following surgical instruments:—

Dr. Hutchinson's Spirometer.

Dr. Sibson's Chest Measurer.

Mr. Whitehead's Apparatus for Uterine Depletion.

Mr. Alexandre's Artificial Leech.

Dr. Simpson's Air Tractor.

Mr. Turner's Hernia Knife.

Wormald's ditto, and Director.

Dr. Marshall Hall's Tracheotomy Treacar.

Mr. Lund's Splint for Thigh, with Extension Rack.

Pessaries in porcelain, of various forms.

Midwifery Forceps of Dr. Radford, and Messrs.

Robertson, Ramsbottom, and Lever.

Medical Intelligence.

PRESENTATION OF

DR. BIRT DAVIES'S PORTRAIT TO QUEEN'S COLLEGE, BIRMINGHAM.

The Council, Professors, and Tutors of Queen's College, and upwards of one hundred Students, partook of a splendid *déjeuner* in the dinner-hall on Friday last, on the occasion of the presentation of the portrait of Dr. Birt Davies to the Institution. The chair was occupied by the Vice-Principal, the Rev. Chancellor Law. Letters expressive of regret at unavoidable absence were received from the Right Hon. the Principal, the Earl Howe, the Lord Bishop of the Diocese, Richard Spooner, Esq., M.P., G. F. Muntz, Esq., M.P., William Scholefield, Esq., M.P., and other gentlemen. At the conclusion of the repast, the Rev. Vice-Principal rose and delivered the following address:—

"It is, I believe, well known to every one here present, that Mr. Sands Cox has devoted more than twenty years of his useful and valuable life to the great object of founding, establishing, and promoting the best interests of the rising College. Nor is it less well known, and scarcely less appreciated, that he has been zealously aided by the co-operation of many valued friends. The Nobleman who was expected here to-day to fill this chair, has exercised his great talents in our behalf; Dr. Warneford has come forward again and again with his munificent contributions to our funds. For many years Dr. Edward and Dr. John Johnstone gave their invaluable services. A body of able Professors and Tutors have worked together assiduously for our good. And there is one—one here present amongst us to-day, Dr. Birt Davies, who has done very much for the College; he has given his valuable time to all our Committees, and at all our Council Boards; he has ever been ready with the benefit of his enlarged experience and distinguished talents; he has gone along with us, from the first to the last, heart and hand. You are well aware that, with professional gentlemen, time is fortune, so that he who gives us his time and energies, gives us the most indubitable proof of his entire devotion to our cause. The Council owes to Dr. Birt Davies, in this and every other respect, a great weight of obligation. What can we do in return? What we can do, that, I believe, we do very sincerely—we tender him our very cordial esteem; we give him our best thanks for his ever-zealous services; and, an opportunity having lately occurred of doing him honour, we avail ourselves of it gladly. Mr. James Pardon, (my friend) the artist, has executed a portrait of the Doctor, and I wish on the present occasion to present it to the College; herewith I do so, with the expression of my own warmest esteem, and with a hope and assurance that the portrait will be highly valued by the College, and obtain an honourable place on these walls long after I have been gathered to my fathers. Of the portrait itself, gentlemen, I need say nothing, it commends itself, being considered a faithful representation, and a spirited likeness. May every comfort, my respected friend, and every blessing be yours; with the retrospect

at the last—peacefully reposing then in faith and hope—the retrospect of a well-spent, honoured, life.”

The Vice-Principal was interrupted by a warm applause during the delivery of the above address.

Professor Dr. Birt Davies then rose, amidst loud cheers, and responded in the following terms:—

“I am much embarrassed to find terms in which to convey the deep sense I feel of the very flattering notice taken of my name on the present occasion, and most highly do I prize the gratifying expression of approval and regard offered to me by our honoured Vice-Principal. But the duty of responding to your kindness would have been ten-fold more formidable if I had not felt that such kind notice was not meant so much for the individual as it is proposed to demonstrate and to make manifest to all concerned in the great work of carrying out the views and objects of this College, that the exercise of zeal and diligence in that cause is sure to be most fully recognized; and that, whatever may be the sphere of the individual, whether his powers be great or small, if he but devote his best energies to carry out in their integrity those great ends for which the College is designed—the eyes, ears, hands, and hearts of those distinguished persons who are placed in authority over us are always open to observe and to evince their notice of the fact, and by the public expression of their approval at a fitting time and place, to stimulate the exertions of others and so, happily, to promote the progress of the Institution. I may perhaps lay claim to having entertained an earnest desire to see the Queen’s College surmount all the difficulties it has had to encounter—difficulties of no ordinary kind—difficulties which only those behind the scenes could properly appreciate—difficulties which would have appalled any heart less stout and less disinterested than that of our energetic founder, Mr. Sands Cox. I hold, Sir, that the great principle embodied in Queen’s College is that of the sedulous and simultaneous culture of knowledge and piety; knowledge in a universal sense—and piety without sectarianism and without bigotry; knowledge, in medicine, in science, in literature, and art, each taught by the best men, and by the best means that circumstances will permit. Piety in accordance with the doctrines and discipline of the Church of England; earnest but unobtrusive—and totally abstracted from any tincture or the slightest odour of religious class opinions or of party politics. On that foundation the edifice has been raised; perhaps at first its progress was slower than if it had been constructed to quadrate with the views of some class powerful and dominant in the State; but on that foundation—whatever may be its ultimate magnitude—it will have much less to fear amid the mutations of time and thought for its enduring solidity and permanence. For the proportions which this Institution has already attained, I may point to the numbers on the register of those who attend your class-rooms; to the list of our Students sent in this year to matriculate in the University of London, a list larger by four than that of King’s College, and of Students who, I am proud to say have done credit to themselves and to their College; and to the fact that of those entered at this College in the present year, many have arrived even from the more distant parts of our kingdom, from Devonshire and Dorset, from Lincoln, Somerset, and

York, and some even from the antipodes,—Australia and Peru. These are proofs—practical, emphatic, and conclusive proofs—of the estimation to which the Institution has attained. We have then, Sir, only to maintain those principles inviolate; we have only to look carefully, constantly, and closely to their execution; to maintain a strict discipline, and to see that every man in the College does his duty, to assure ourselves of the accomplishment of all the objects contemplated by our founder, and by his and our great benefactor, Dr. Warneford, and to consummate all the great benefits anticipated by them, not only to this particular district, but also to the age in which we live. In conclusion, I can only repeat that I feel deeply sensible of, and extremely gratified for, the kindness shown to myself; and I can assure you that, through good report and ill—at times it may be, incurring for myself some unpopularity in the discharge of painful duties, and at others, rejoicing in the bright sunshine of your kindness, I shall continue to do my best to second the able plans and measures of my excellent and esteemed friend, the Dean of the Faculty, always looking with reverence and gratitude to the fostering care and guidance of the Rev. the Vice-Principal.”

The Doctor resumed his seat amidst loud applause, which continued for some minutes, and the company shortly afterwards separated.

RESULTS OF MARRIAGE WITH COUSINS OR OTHER BLOOD RELATIONS.

In the course of an extensive inquiry into the history of idiocy, it was found that of seventeen families, the heads of which were cousins, that in one there were five children born idiots; in five there were four idiots in each; in three, three in each; in two, two in each; in six families, one in each. In these seventeen families, there were in all ninety-five children; of these, forty-four were idiotic, twelve scrofulous and puny, or deaf and dumb; fifty-eight in all of low health and corporeal type. The remainder were only tolerable in constitution.—*American Journal of Medical Sciences.*

MEDICAL DIRECTORY.

The management of the Medical Directory is henceforth entirely in the hands of Mr. Churchill. We hope our brethren in the provinces will afford him every information necessary for correcting this useful publication.

COLLEGE PRIZES.

The Council of the Royal College of Surgeons have just announced the subject for their triennial prize of fifty guineas to be on “The Functions of the several parts of the Large Intestines in Animals of the Class Mammalia.” The Jacksonian Prize subject (of twenty guineas) is, “Neuralgia, its various Forms, Pathology, and Treatment.”

THE CHOLERA IN THE UNITED STATES OF AMERICA.

The mortality from cholera is rapidly on the increase at New York. From the 19th to the 26th of June there were no less than 333 cases and 129 deaths. A letter, dated July 3rd, states that the progress of cholera is striking terror into the population. The epidemic is also raging in the valley of the Mississippi, on the western coast, in Texas, and in the northern part of Mexico. The cholera has materially increased at Saint Louis since the great conflagration. In one week 763 deaths were returned, and of these 589 were ascribed to cholera. The eastern coast of the States has comparatively suffered but little, with the exception of New York, where from forty to eighty cases are returned daily, out of which half are proving fatal.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, July 20th, 1849:—William Harvey Dixon, Putney; Frederick Fellows, Belfast; Henry Saunders Grant, Northampton; Joseph Louis Maurau, London; David Grant McPherson, Bristol; Henry Newcombe, York; Robert Powell, Bristol; Theobald Ringer, Langharne, Carmarthenshire; Joseph Powell Swanwick, Prestbury, Cheshire; Charles Terry, Bath; George Alexander Cockburn Thiselton, York; James Goodchild Wakley, Harefield, Middlesex; John Wilcocks Waken, London.

Gentlemen admitted Members on Monday, July 23rd, 1849:—Samuel Atkinson Brough, Marlborough, Wiltshire; William Helps, Gloucester; George Thomas Jones, London; William Walkinshaw McCreight, Castle Wellan, County Down; James Patrick Mullarky, Sligo, Ireland; Charles Dering Nettleton, Devonport; Robert Rooke France, Hampstead; George Whittaker Walter, Market Rasen, Lincolnshire; Francis Harrison Walmsley, Manchester; Thomas Middleton Williams, Sherrington, Buckinghamshire.

Gentlemen admitted Members on Friday, July 27th, 1849:—Robert Adamson, Durham; John Clitheroe, Earnshaw, Lancashire; William Owen George, Plascrwn, Pembrokehire; Philip Edward Leigh, Jamaica; Wm. Aston Lewis, Manchester; William Percy Pickard Mackesy, Waterford; Edward Leopard Neville, Hounslow, Middlesex; John Harrison Robotham, Wilne, Derbyshire; Arthur Rudge, Fakenham, Norfolk; Joseph Sawyer, Whitehaven, Cumberland; Edward John Vivian, Guildford Street, Russell Square.

Gentlemen admitted Members on Monday, July 30th, 1849:—Frederick Bateman, Norwich; John Cromwell Blackford, Bromsgrove, Worcestershire; Charles Mathias Miller, Ecclesfield, near Sheffield; David Morgan, Bodwigiad, Breconshire; Thomas Llewellyn Nash, Dublin; Samuel Plumble, London; John Rorie, Plymouth; Charles Augustus West, Consumption Hospital, Brompton; Thomas Kyran White, Threecastle, County Kilkenny; Thos. Wilson, Elverstown, Blessington, County Kildare; John Wood, Bradford, Yorkshire.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Members on Thursday, July 19th, 1849:—Frederick Thos. Barkway, Gravesend; Benjamin Tillyer Blunt Baillie, Dorchester Place, New North Road; William Thomas Sampson Ingram Hardy, Devonport; John Hayes, Longton, Staffordshire; Charles Octavius Rowley, Barnesley; William Squine, Silso, Beds; Henry Duncan Smith, Sandwich, Kent; William Tomlin, Nottingham; William Thomson, Drigg, Cumberland.

Gentlemen admitted Members on Thursday, July 26th, 1849:—Thomas Allen, London; Arthur Octavius Arden, Beverley, Yorkshire; Joseph Barton Carter, Beverley, Yorkshire; Thomas English; Charles James Evans, Belper; Edward Jackson, Sheffield; William Talbot King, Hackney; George Cochrane Millar, Clifton Street, Finsbury Square; John Harrison Robotham, Wilne, Derbyshire; Richard Heaton Rusher, Oxford; John Markwell Todd, New Cross Road, Deptford.

BOOKS RECEIVED.

Researches on the Development, Structure, and Diseases of the Teeth. By Alexander Nasmyth, F.L.S., F.G.S. London: John Churchill. 1849. 8vo, pp. 230.

History of the Cholera in Exeter in 1832. By Thomas Shapter, M.D., Physician to the Devon and Exeter Hospital, &c. &c. London: John Churchill. 1849. 8vo, pp. 292.

On the Gout; its History, its Causes, and its Cure: By W. Gairdner, M.D. London: John Churchill. 1849. 8vo, pp. 232.

A Dissertation upon Dislocations and Fractures of the Clavicle and Shoulder-Joint, being the Jacksonian Prize Essay for 1846. By Thomas Calloway, F.R.C.S., Demonstrator of Anatomy to Guy's Hospital. London: Samuel Highley. 8vo, pp. 178.

The London Journal of Medicine, a Monthly Record of Medical Science. No. VIII. August, 1849. Taylor, Walton, and Maberley.

The Harveian Oration, delivered before the Royal College of Physicians. By John Carr Badsley, M.D., Cantab., Fellow of the College. London: John Churchill. 1849. 8vo, pp. 20.

The Dublin Quarterly Journal of Medical Science. No. XV. August, 1849. Dublin: Hodges and Smith. 8vo, pp. 252.

The New York Journal of Medicine and the Collateral Sciences, May, 1849. New York: Daniel Fanshaw.

Monthly Journal and Retrospect of the Medical Sciences, August, 1849. Edinburgh: Sutherland and Knox. London: John Churchill.

TO CORRESPONDENTS.

Communications have been received from J. H.; F.R.C.S.; Mr. Humphry; Dr. Kingdon; Mr Smith.

The letter of J. H. cannot be inserted without forwarding his name in confidence to the Editor.

In consequence of the lamented death of Dr. Streeten, it is requested that all letters and communications be sent to J. H. Walsh, Esq., Foregate Street, Worcester. Parcels and books for review may be addressed to the care of Mr. Churchill, Princes Street, Soho.

DELIVERED IN THE

Downing College, Surgeon to Addenbrooke's Hospital.

LECTURE XII.

FRACTURES.

Parts of the Skeleton most frequently broken ; varieties of fractures ; differences in the Skeleton at different periods of life ; it may be broken by force of muscles.—Reunion of fractures corresponds with healing of soft parts ; conversion of lymph into cartilage, the mode in which union with the old bone is effected ; ossification of the cartilage ; provisional and permanent callus ; the former often absent ; circumstances under which it is most abundant ; absorption of provisional callus ; objection to terms—provisional and permanent, and substitution of external, internal, and intermediate ; modelling of the old bone in overlapping fractures ; fractures into joints ; compound fractures ; diagnosis of fractures.—Treatment : splints should be applied at first ; treatment of fractures in elderly persons, and of injuries generally.—Weakness of limb and stiffness of joints remaining after fracture.

Nearly all the bones of the skeleton are liable to be broken at any part, the long bones being more particularly so. The fracture most commonly takes place through the epiphyses in early years, through the shafts in middle age, and in the cancellous parts during the decline of life. The bones of the upper and lower extremities suffer about equally. In the lower extremities fracture occurs most frequently about the junction of the lower and middle-third of the leg, because the bones are there smaller in proportion to the weight they bear than in any other part of the skeleton. You may have observed, that if a man falls upon his feet fracture is more likely to occur in the tibia and fibula just above the ankle, than higher up or in the femur. In the upper extremities the radius and ulna near the wrist, and the clavicle about its middle, are more frequently broken than other bones.

The fracture generally runs quite through a bone in a transverse or oblique direction. In the flat bones, however, fissures frequently stop short of the edge of the bone; in the skull they sometimes run into the

foramina; at other times they commence and terminate in the substance of the bone. It now and then happens in children that the bones are bent, and this is usually attended with incomplete fracture; there may be only a cracking or fissuring upon the convex and concave sides of the curve; or the bone may be broken half through, and a fissure may run upwards and downwards into the shaft from the fracture, just as a stick gives way when you try to break it by bending it across the knee. This bending, with more or less cracking, sometimes takes place in the flat bones; thus a blow on the skull of a child may cause a bending in of the bone like the dent in a pewter pot; and I have known the same sort of thing, with fissuring of the bone occasioned in the cranium of an adult, by a cart wheel grazing against it. The broken ends of the bone may be more or less splintered and fragments detached, when the fracture is said to be comminuted; or there may be laceration of the soft parts and a wound in the skin communicating with the fracture, which is then said to be compound.

The soft supple skeleton of the child is well protected by an ample subcutaneous cushion of fat, in consequence of which its breakages are not proportionate to its exposures. Nevertheless, it is so often exposed to accident that it is very frequently broken, or its epiphyses are separated. During growth the earthy components of the bones are added in gradually increasing proportions, so that the structure becomes tougher and more resisting; and in the adult the saline ingredients are intermixed with the animal matter in such quantities as to give the skeleton its greatest strength. This, however, is from various causes, the period at which it is most frequently broken; you have probably observed that the greater number of fractures received into the hospital are in the persons of middle-aged men. In the decline of life, the quantity of earthy matter being gradually on the increase, the bones become more brittle, so that a slight force will break them. M. Mercier has observed that the cancellous parts of the skeleton in old people undergo partial absorption in an interstitial manner, and are rendered more spongy and weaker by the thinning of their septa and the enlargement of their cells; the calibre of the medullary cavities is also increased at the expense of the internal spongy layers of the bone which almost disappear. The more compact tissue of the skeleton, on the contrary, such as the exterior hard parts of the shafts, become tougher and denser

than in adults. This increasing difference between the compact and cancellous parts of the skeleton, which seems to be the result of a continuance of the changes progressing in early life, and leading to the formation of the medullary and other cavities, accounts, in some measure, for the fact that fractures occur so frequently in the cancellous extremities of the long bones in elderly persons, and are comparatively rare in the shafts and harder parts. The contrast of the liability of different parts of the thigh bone to break at different periods of life is very remarkable; in the old man, fracture of the neck and upper end of the bone is an ordinary occurrence, the shaft being seldom broken, whereas in early life exactly the reverse is the case.

It is probable that, in addition to the changes just mentioned, the skeleton of the old man loses some of its resisting power in consequence of other variations from the adult type in its chemical composition; such as an alteration in the quality of its earthy matter and the nature of its animal constituents, in the quantity of oily substance contained in it, some of which seems to find its way into the structure of the bone, instead of being confined to the medullary tissue, &c. These alterations, which all tend to weaken the bones, take place first and chiefly in the cancellous parts of the skeleton, and furnish a cause no less probable than that adduced by M. Mercier, for their comparative liability to fracture in the later periods of life.

The strength of the skeleton varies greatly in different persons. It is usually proportionate to the force of the muscles which act upon it, but sometimes it is so fragile as to give way under their contraction. Thus the humerus has been broken in lifting a teapot and in throwing a ball. Even a sound bone may be broken by an inordinate contraction of the muscles connected with it. The fractures of the patella generally occur in this way, being caused by the sudden and forcible action of the quadriceps femoris made during an attempt to save the person from falling; and some of you have probably heard Mr. Hammond relate a remarkable case which he witnessed where the femur was broken in its middle by the spasmodic contraction of the muscles of the thigh during the early stage of Asiatic cholera, whilst the patient was lying in bed.

The reunion of a broken bone takes place much in the same manner as the healing of the soft textures of the body; the new material, or lymph as it is called, effused between the divided parts being converted into osseous structure, which corresponds in the laws of its formation and in its function with the cicatrix of the skin and other soft parts. Indeed it presents a nearer resemblance to the tissue it replaces than cicatrix commonly does. The difference between the reunion of the osseous and the soft parts of the frame consists chiefly in the greater length of time required for the completion of the former. That this difference should exist is no more than we might expect, from the dense resisting structure of the skeleton, its comparatively slow formation in the fœtus, and its remaining in an immature state for a considerable period after the other structures have acquired their peculiar characters.

Suppose a transverse fracture through the shaft of a long bone. It generally happens that the periosteum is torn through in the whole, or in part, of its circumference, and is further separated from the bone for a short distance above and below the fracture; the surrounding cellular tissue and muscular fibres are also more or less lacerated by the broken ends of the bone, or by the blow which caused the fracture. In the first instance blood is effused and coagulates between the broken and lacerated parts, extending for a short distance into the medullary cavity above and below the fracture, into the interval between the periosteum and the bone, and also to a greater or less extent among the surrounding soft parts, causing the bruised appearance which is often observed at a considerable distance from the fracture.

Soon the limb swells and becomes rather hot, tender, and painful; the blood is absorbed, the red particles first disappearing, and afterwards the fibrin. It may be that some of the latter remains, and becomes intermixed with the lymph effused in consequence of the first or reparative stage of inflammation which is now established. This lymph alone, or blended with a small quantity of the unabsorbed fibrin of the blood, to which it may possibly impart some of its own energy of organization, forms the basis of the uniting medium, is, in short, the lymph bed of organization, as the corresponding formation is called, when we speak of the healing of wounds in soft parts. It occupies the same, or nearly the same, position as the blood which had been first effused, but does not extend to so great a distance from the fracture. It encases the broken ends of the bone, runs into the medullary cavity, and is found among the surrounding lacerated soft parts, which are somewhat swollen, and are thus blended together by it as by one common bond of union. The soft parts and the bone are at this time more vascular than usual, so that a coloured injection thrown into the main artery of the limb may be seen to enter the vessels in the neighbourhood of the fracture more freely than in other situations. All the tissues are also a little softened, and the bone sharing in this change, and undergoing slight interstitial absorption, becomes somewhat soft and porous, as well as vascular. This alteration in the broken ends of the bone is very slight, and I should tell you that it is not admitted to exist by some anatomists, who have made experiments for the purpose of illustrating the process of re-union in fractures.

There is to be found, then, a few days after the injury, occupying the site of the fracture, a new material composed of lymph, of homogeneous structure, and forming one common uniting medium for all the several tissues which have been severed by the injury; we have now to consider the different transformations which this homogeneous substance undergoes to adapt it for the union of each of the several divided structures. The bone, periosteum, cellular and muscular tissues, are all to be re-united, and each exerts its particular influence upon the new lymph-bed of organization, so as to assimilate it in some measure to itself, and to adapt it for the fulfilment of its own functions, in a greater or less degree.

Vessels are first developed in the lymph, and become connected with the vessels of the periosteum and bone of the muscles and other surrounding soft parts, so that a circulatory current is established through it, and it presents the appearance of a reddish, soft, pulpy substance, occupying the position above described; the colour being now dependent not so much on the remaining globules of the blood first effused as on the red blood circulating in its vessels. Soon afterwards the lymph lying between the torn ends of the periosteum, becomes converted into a toughish cicatrix-like substance, which re-establishes the continuity of the membrane. This at least sometimes occurs, though not always quite in the manner I describe. The same thing takes place with regard to the surrounding soft parts; the muscular fibres are re-united, and the areolar tissue is re-produced in the cicatrix, so that the muscles and tendons become again separated from one another and from the periosteum, and resume their free play over the fracture. The healing of the soft parts is thus accomplished in two or three weeks after the accident.

A longer period is required for the completion of those changes, by which the new lymph substance is converted into a solid bond of union between the broken ends of the bones. Nevertheless, you must understand, that the change is of the same kind as that which I have just been describing to take place in the formation of cicatrix between the soft parts, and is due to the operation of similar forces. The lymph encasing the fracture, and walled in by the periosteum, is converted into bone in the same manner, and by assimilative agencies of the same kind, as those by which the lymph effused between the torn ends of the periosteum, and on its exterior, is transformed into fibrous and cellular tissue, cicatrix of muscle, and so on. It probably matters little, as regards the conversion of this lymph into bone, whence it has been derived, whether it has been furnished by the blood circulating in the vessels of the bone, the periosteum, or the surrounding parts. Its nature and properties are most likely the same from whichever of these sources it has been effused, and the changes it has now to undergo are the result of the assimilating influences of the tissues near which it lies regulating and modifying its own peculiar tendencies and qualities. You need not, therefore, perplex yourselves by attempts to solve the trite question, whether the new bone is formed by the vessels of the old bone, the periosteum, or the surrounding parts. Such a question is indeed scarcely consistent with those advanced views of physiology by which the vessels are seen to be, not the agents of nutrition, but simply the carriers of the materials for the work, and which attributes the formation of the tissues to the independent force of organization of the fibrin or lymph, modified by the assimilative influence of the immediately-adjacent structures. It is probable that lymph derived from any source may be converted into bone, provided it be situated within the range of those assimilative influences upon which ossification depends.

The formation of the bony substance which unites the fractured ends, or the callus, as it is called, takes

place in the following manner:—The soft reddish lymph surrounding and intervening between the broken extremities, extending into the medullary canal, and covered in by the periosteum, becomes, from the second to the third week, or thereabouts, converted into a firm toughish structure, resembling fibro-cartilage. The change by which this is effected commences in the lymph occupying the angle between the separated periosteum and the bone, and in the lymph effused into the medullary canal above and below the fracture; thence it proceeds upwards and downwards to the line of fracture, which is the part last affected by it. The broken ends of the bone are thus encased by an external ring, and joined by an internal plug of cartilage, which forms a tough, though flexible, bond of union sufficiently strong to prevent the displacement of the bone, but so yielding as to suffer it to bend at the fractured part. Subsequently, and more slowly, the lymph intervening between the ends of the outer compact walls of the shaft, becomes likewise converted into cartilage, and unites the ring on the outside, with the plug in the interior.

The process is curious by which the welding of this ring of cartilage with the hard structure of the bone is effected. It seems that, in consequence of the slight inflammatory or reparative process, the extremities of the bone become a little softened, and some interstitial absorption takes place on their surfaces, giving rise to a peculiar rough or worm-eaten appearance. Into the chinks and little holes thus made the new soft material is run, like molten metal, and solidifying there acquires very close and firm connection. You may generally see this condition of the surface of the bone by tearing off the new substance while it is in a soft state. In these two bones, both taken from old people, where union has failed for want of sufficient energy to effect the proper formation of callus, this change has taken place in the fractured extremities, which, in both instances, are rough, porous, and look as if they had been worm eaten.

When the formation of cartilage is completed, the ends of the bone are so firmly bound together, that no crepitus can be felt, although the limb bends at the broken part when the patient attempts to raise it from the bed; the free play of the muscles over the fracture is by this time restored, all surrounding swelling has subsided, and the patient is quite at ease.

The next change, commencing soon after the third week, consists in the conversion of this cartilaginous substance into bone. The process of ossification begins at the same point, and extends through the different parts of the uniting medium in the same order as the formation of cartilage had done. That is to say, the opaque nucleus of ossification is generally first perceived in the centre of the cartilage occupying the angles between the separated periosteum and the bone. From these points it radiates, reaching the hard wall of the shaft, extending into its crevices, and acquiring a firm connection with it. It travels upwards and downwards to the line of fracture, and crosses that line, so that an inosculation is established between the bony rings formed around each of the fractured ends; and they are converted into one broad

ring or clasp enclosing the fracture, firmly united as I just described to the broken portions above and below, and forming, therefore, a hard bond of connection between them. In like manner the ossification commencing in the plug at either end of the medullary tube, extends across the line of fracture, and forms here also a firm cement, joining the broken ends. The inosculation of bone across the line of fracture is the most difficult part of the process, requiring rest for its completion, and liable to be disturbed if a slight degree of movement be permitted between the fractured surfaces. We shall find, when considering the subject of ununited fracture, that this stage of the process is the one which most frequently fails to take place.

We have now, then, at about five or six weeks after the accident, the broken ends united by a bony ring on their outsides, and by a bony plug extending for a short distance into the medullary cavity, and obliterating it. The uniting medium thus formed becomes soon of sufficient firmness to bear the weight of the body, but the process of reparation is not yet completed, for the opposed edges of the exterior compact wall of the shaft are at present united only by cartilage, in consequence of the ossification taking place in this situation more slowly than in other parts, just as I told you that the conversion of lymph into cartilage takes place very tardily at the same point. By slow degrees the ossification extends to the cartilage lying between the extremities of the hard outer wall of the shaft, and the bony cement is here formed, uniting the edges of the shaft, and joining the external ring and the internal plug of callus firmly together. This ring and plug formed at an early period, to provide as it were for the reunion of the bone while the longer and more difficult part of the process is going on, has been termed by Dupuytren and other writers the provisional callus, in contradistinction to the callus which is last formed, and which is generally called permanent. It is well that some such provision takes place, for the consolidation of the extremities of the bone by the permanent callus is often many months, and may be even years, in progress.

The quantity of callus formed in the reunion of fractures varies a good deal. It is most abundant when the fracture is attended with much injury of surrounding parts, such as laceration and separation of the periosteum and muscles, or when, in consequence of continued movements or other cause, the first stage of inflammation is excited in a greater degree, or maintained for a longer period than usual. It takes place to the greatest extent after fractures in the lower animals, for in them the soft parts are generally much lacerated, the limb is subject to continual movements, and the ossifying processes are particularly active. It is from experiments made upon animals that the descriptions of the formation of callus, and particularly of the provisional callus, have been in great measure given. The several stages of the process of reunion which I have been describing are best witnessed in them, and the specimens on the table illustrating those stages are chiefly taken from animals. In many cases of fracture in the human subject, where the injury to the soft parts has been slight, and the limb kept at

rest, the formation of callus upon the exterior of the shaft, in other words, of the provisional callus, takes place to a very slight extent, so slight indeed, as scarcely to attract notice, and the union is then effected by the internal callus or plug, and by the intermediate or permanent callus, by which I mean the callus situated between the edges of the compact wall of the shaft. If this be so, you will naturally enquire whether the intermediate callus is in these cases so slow in its formation as under other circumstances it is described to be, and whether the reunion of the fracture is delayed for months, till it can be completed. I believe you will generally find, that when the periosteum has been but little torn or separated, and the external callus is consequently small, that the intermediate callus is more quickly formed. The comparatively rapid production of the intermediate or permanent callus, under such circumstances, is probably owing to its greater proximity to the periosteum; for an observation of the reparative processes in bones generally shows that the formation of new bony matter takes place with greatest facility in the neighbourhood of the periosteum, next in the vicinity of the spongy tissue of bones, and with greatest difficulty near the compact structure of the shafts of long bones when the periosteum has been removed from them. I think the formation of callus takes place more readily and abundantly in children than in adults, which probably depends upon the ossifying processes being more energetic in them, and the periosteum as well as the bone being more vascular.

The formation of the external or provisional callus is, therefore, by no means a constant or essential stage in the reunion of broken bones. Neither does it appear to expedite the cure, for, as I just said, in cases where the external callus is deficient, the intermediate is more quickly produced, and the firm union of the bones is scarcely delayed at all. This external callus seems to be related simply to the extent of laceration of the soft parts and the amount of inflammation consequent thereon, or occasioned by the movements to which the limb is afterwards subjected. These specimens show it to be produced on the shafts of bones more abundantly than upon their spongy extremities, which is probably accounted for by the periosteum being more easily separated, and the soft parts more commonly lacerated in the former situation than in the latter. If a fracture be occasioned by a force applied laterally, the periosteum is generally torn through on the one side even with the fracture, and may not be separated from the bone at all in that situation, whereas on the other side it is detached from the bone to a greater extent, though it may be very little torn or otherwise injured. Now, in such a case, as these specimens sufficiently illustrate, the external callus is formed chiefly between the detached periosteum and the bone; very little on the opposite side. Again, in fractures like this which I now show you, where there is much displacement, with overlapping, the external callus is formed, as you see, almost exclusively between the contiguous sides of the broken ends, the periosteum and adjacent soft structures being here more disturbed by the surfaces of the bone rubbing on one another than in other parts. In this situation it is formed

quickly and abundantly, and constituting the only bond of union may be called the permanent callus. Scarcely any callus is formed upon the other sides of the fracture, and sufficient only upon the extremities of the bone, which are widely separated from one another, to plug up the medullary canal.

I hope I have said enough respecting this external or provisional callus, to make you understand the real cause of its formation, and to explain to you that though it is not to be considered as a necessary part of the reparative process, being often wanting altogether, nevertheless that it does in some cases, to wit, in the overlapping specimens I just showed you, constitute the great and permanent—indeed the only bond of union between the fractured surfaces; and in other cases, where the periosteum has been much detached, it is produced in considerable quantities, and serves to hold the broken ends firmly together while the ossifying process is slowly pervading the cartilage which occupies the intermediate part of the fracture between the hard edges of the shaft.

The term provisional has been applied to this external callus, and I should say also to that which occupies the medullary canal, because, in course of time, when the intermediate or permanent callus has been fully formed, these two may undergo more or less complete removal by absorption. This is particularly true of the internal callus; and the continuity of the medullary canal is sometimes quite restored by its disappearance. It is true also in some measure of the external callus, for it does yield to a certain extent to this modelling process of absorption, and the proper external contour of the bone may be regained, as well as the continuity of its medullary tube restored. That this often takes place in a very imperfect manner only, is sufficiently shown by the knotty bulky masses of callus which surround some of these old fractures. The superfluous parts only of an external callus are absorbed, for when any portion of it is of advantage in contributing to the strength of the bone, it is permanent. The term provisional, expressing as it does, an occasional and unimportant, rather than an essential, feature of the callus, is likely to mislead you as to the real nature and object of this formation; I have, therefore, preferred the words external, intermediate, and internal, in the description of the different parts of the callus, because they relate merely to position, and cannot, therefore, involve any incorrect theories respecting the uses of the parts to which they are respectively meant to apply.

I should tell you that the torn ends of the periosteum do not always unite in the neat manner I have described so as to form a capsule, embracing and walling in the callus in the early stage of its formation. Sometimes they are blended with it so that they cannot be distinguished and separated from the cartilaginous matrix. At other times the callus projects considerably beyond the edges of the periosteum, and is formed among the tissues external to it. Sooner or later, however, the continuity of the periosteum is restored by the formation of new fibrous tissue over the callus.

We have now gone through the examination of the several stages of the process by which the firm reunion

of a broken bone is completed; but the work of reparation does not always stop here. It is not content simply with healing the breach, and reducing the callus to serviceable dimensions. During a long period of months, and even years, its efforts to restore the bone more and more nearly to a natural shape, are sometimes continued. Not only is the plug blocking up the medullary canal removed, but portions of the original bone which, in consequence of the displacement of parts, project into the canal, are also absorbed, and the tube is reopened through them. By the same process, when a tubular bone has been reunited, with much overlapping, so that the continuity of the medullary canal is quite lost, and each end of the bone is plugged with callus, it may be that a new line of tube is established through the contiguous walls of the shaft and the callus by which they are united, so that the medullary canal above the fracture is by this means reunited to that below it. In this specimen, for instance, the union of the overlapping fragments has been effected by the formation of callus between their opposed sides which has coalesced with both of them. The callus has a dense smooth exterior, like the wall of the bone, and spongy structure in its interior, resembling the medullary cavity. Moreover, the wall of the old bone has become porous about this region, so that the continuity of the medullary tube is in part restored through the centre of the callus, and through the opposed walls of the shaft. Of course this spongy condition of the interior of a callus uniting the sides of overlapping bones, is only found when the callus is of considerable thickness; and I do not wish you to suppose that I attach any especial importance to the continuity of a medullary tube, but have merely called your attention to these facts for the sake of pointing out to you the long continued efforts maintained after the reunion of a bone, for the purpose of regaining that shape which combines strength with lightness in the greatest degree, and of restoring the bone more nearly to an accordance with the original plan of its construction.

Portions of the shaft also which, in consequence of the displacement of parts, are thrown out of the line of the weight of the body, and are, therefore, useless, undergo atrophy, becoming light and porous, but they do not generally disappear altogether; indeed, I have often been surprised at the sharp angular fragments which remain for years projecting from an ill-set fracture.

If you have understood this general outline of the mode by which fractures of the shafts of long bones are repaired under ordinary circumstances, you will be able to make out for yourselves the different modifications that must be required in particular cases; for instance, when the fracture is comminuted or the surfaces displaced in various ways. Fractures of the flat bones, as the scapula, the cancellous bones, and the expanded ends of the long bones are reunited in the same manner; except that as I before told you there is not generally much external callus about the fracture of the cancellous bones, because the periosteum, in consequence of its close adhesion to them, is detached to a very slight extent or not at all. The cancellous texture, like the medullary cavity in the

shaft of a long bone remains preternaturally compact in the line of fracture for a long period after the injury, but ultimately resumes its natural condition.

When a fracture extends through the cancellous extremity of a bone and its cartilaginous covering into a joint, the injury is generally followed by some inflammation causing the effusion of serum and lymph into the articular cavity. The fissure in the cartilage becomes filled up and covered in by lymph, and, in course of time this lymph is converted into a tough fibrous structure firmly uniting the cartilage, and presenting a smooth surface towards the joint; but there is no formation of bone upon the articular surface. Stiffness of the joint is not to be feared from the projection of callus into it, so much as from the effects of inflammation; for besides the effusion of lymph which may occasion adhesion of the synovial surfaces, the inflammation consequent on fracture into a joint is sometimes followed by absorption or even ulceration of the cartilages.

The circumstances attending a fracture into a joint are not favourable to the reunion of the broken bones; for, in addition to the liability of the parts to be disturbed by movement, the effused products from which the callus should be formed become intermixed with synovia, and may fail to be ossified. Here are specimens of fracture into the elbow joint where this failure has occurred. The fractured bones are united only by fibrous tissue, and the joint is surrounded by nodules of bone corresponding to external callus, but they are united to one another and to the old bones only by fibrous tissue, so that if the specimen were macerated they would all be quite loose; and the articular cartilages are reduced to a fibrous shreddy state. In this specimen of fracture through the lower end of the tibia which has been macerated, you see that the fragments of the bone as well as those of the external callus are loose, though they were united by fibrous tissue sufficiently strong to admit of the man's walking upon the limb. The cartilages have also undergone the same change as in the elbow.

The reunion of a simple fracture taking place in the manner I have described corresponds exactly with the healing of the soft parts, by adhesive inflammation, the difference consisting only in the greater length of time required for the completion of the process. When the fracture is compound, the wound may heal up at once, and the case be reduced to the condition of a simple fracture, which is the most desirable result. Should this not take place, the blood and lymph first effused escape through the wound in a fluid state, and the reunion of the broken bone and of the soft parts, has to be accomplished by a secondary formation of lymph, which becomes converted into granulations. These granulations, springing from the ends of the bone, the periosteum and other structures inosculate across the line of fracture, and become transformed into a toughish fibro-cellular or fibro-cartilaginous structure, which ossifies much in the same manner as the corresponding substance in simple fractures; but the process is much more tedious, is attended with suppuration, and is liable to be interfered with by severe inflammation in the surrounding parts, by necrosis of

the ends of the bone, and a variety of circumstances. The formation of callus on the exterior of the bone, in its medullary cavity, and between the edges of its compact outer wall, may in these cases be sometimes observed to correspond with external, internal, and intermediate callus of simple fractures. Generally, however, the callus is produced in a very irregular manner, and very slowly. It long remains soft, crumbling when macerated, and by very slow degrees only does it attain that near resemblance to the structure and composition of true bone which the uniting medium of simple fractures is found to possess.

The diagnosis of fracture in the shaft of a long bone is easy enough. The altered contour of the limb, the unnatural flexure, and the circumstances attending the accident, render the feeling of crepitus, which may be occasioned by rubbing the broken ends upon one another, unnecessary. When the neighbourhood of a joint is the seat of injury, the diagnosis is more difficult, and will test your skill and knowledge of the anatomy of the part very closely. This is particularly true of injuries at or near the elbow, and of the fibula near the ankle. I would advise you to pay great attention to this department of practical surgery; not merely because your own reputation is likely to suffer by a mistake in cases of this sort, but because it is of much importance to the future utility of the patient's limb, that a correct diagnosis should be made at first. The requisite information to guide you in difficulties must be obtained by close observation of the skeleton, and diligence in the wards of the hospital. I can here only commend the subject to your careful attention.

The crepitus occasioned by the rubbing together of the broken surfaces is, when clearly felt, alone sufficient evidence of the nature of the injury, but some caution is required to enable you to appreciate correctly, even this simple means of diagnosis; for sometimes it cannot be felt, owing to the particular position of the surfaces, and at other times it is simulated by the sliding of tendons, or the rubbing of the articular cartilages upon one another, upon the blood, and upon the soft structures on the exterior of a joint, when dislocation has taken place.

The treatment of fractures is almost exclusively mechanical, our object being to reduce the fractured surfaces to their proper position, and to keep them there. That this is not always an easy matter is sufficiently shown by the various positions in which broken limbs are placed by different surgeons, and the various retentive means which have been recommended. I would advise you not to be biassed by any particular theories, or bound by any particular rules, but to place the limb in such position as you find disposes the fractured surfaces to fall into apposition most readily, and your first object should be to ascertain that position. If the broken bones do not fall readily into place with the limb lying one way, try another, and be not satisfied till you have found that which is most suitable. It is far better to rely upon the position of the limb for securing the correct adaptation of the fractured surfaces, than upon splints and bandages. You should endeavour to arrange all this when you first see the patient. It may happen,

however, that the spasmodic contraction of the muscles is so great that you cannot decide the position of the limb till a few days have elapsed, and the part has fallen into a more quiet state.

In fractures of the leg and thigh I generally try first the straight position, with the patient lying on his back, because I find that it suits the greater number of cases, and because I am certain that the patient is more easy and manageable in this posture than in any other. It answers more particularly well when the fracture is situated near the middle of the limb. If it be near one of the extremities of the femur or tibia, it is sometimes necessary to bend the limb for the purpose of relaxing the muscles attached in the immediate neighbourhood of the fracture, but even in these cases I have often found the advantage of substituting the straight for the flexed position. We use the double inclined plane, or Earle's bed, with benefit in some cases, as in fracture of the upper or lower end of the femur, but as a general rule the patient is less comfortable upon it than when lying on his back, with the long splint applied on the outside of the limb, and he is more liable to suffer swelling of the leg, and stiffness of the knee, which not unfrequently prove a source of greater and more tedious inconvenience than the fracture itself.

Having ascertained the position in which the broken bones fall together most readily, we next endeavour to secure their being kept at rest by the application of splints and bandages. The former, of course, should be fitted to the size and shape of the limb, and well padded with some soft material, so as to prevent injurious pressure. It is, I believe, the best practice to apply these at once, for by securing and supporting the limb they save the patient much pain, and they unquestionably exert a good deal of influence in keeping down the swelling and inflammation which is likely to follow an injury of this sort. If the limb be in the first instance laid loosely upon a pillow, and covered with cold lotion for two or three days, which is the practice of some surgeons, it almost invariably swells more, and is more painful, than if the moderate pressure of well padded splints be applied soon after the accident. This observation requires to be guarded by the hint that you ought to remove the bandages and splints if the part should happen to become more painful under their pressure, because the neglect of this precaution has sometimes been followed by considerable injury to the limb; indeed I have already related a case to you in which mortification supervened under such circumstances.

Much care is required in the management of fractures in elderly persons; for the confinement to bed, added to the shock of the accident, may be sufficient to depress their bodily powers beyond the possibility of rallying. They are shaken, enfeebled, become sallow, and die of exhaustion. You should take heed, therefore, not to reduce their diet too much, and watch for the symptoms of bed sores, so that you may catch the earliest intimation of their appearance, and place the patient upon a water-bed, or apply to the broken limb an immoveable apparatus, composed of of egg-splints and starch bandages, or other similar

materials. The patient may then be allowed to get up and move about on crutches, without detriment to the fracture. By a little care, and the timely employment of such means, you may often save your patient's life in cases of this sort. The same remarks apply more or less to the ordinary treatment of fractures, even in adults, for though they generally do well under any circumstances, if the limb be kept quiet, yet some persons suffer much from the confinement to bed, become pale, weak, and low spirited, and the work of reparation drags heavily on unless the diet be improved, or the patient allowed to move about, with the limb supported in the way I have mentioned.

Indeed, in the treatment of other injuries which require the confinement of the patient, no less than in fractures, is it necessary to be watchful, especially with regard to persons who have passed the middle period of life, who have been in the habit of living freely, or have been much in the open air; for when the stimuli upon which they are accustomed to depend are discontinued, they soon begin to droop; perhaps they present the symptoms of delirium tremens, or they fail more gradually, and having little vigour to resist disease, and still less power to rally from it, they succumb under slight disturbing causes, which in their more healthy state would have produced no impression upon them. A slight exposure to cold causes inflammation of the lungs, which soon runs on to suppuration; or a little disorder of the stomach and bowels gives rise to fatal diarrhoea. I have repeatedly known stout, florid, robust-looking persons confined to bed and kept on low diet, in consequence of an injury, suffer in this way, who might probably have escaped had a more liberal diet been permitted, and the confinement within doors been less rigidly enforced. Sometimes they recover from the immediate effects of the injury, but are so shaken by the ordeal they have undergone, that they do not rally, and soon fall victims to some other attack.

The period when the fracture is united with sufficient firmness for the patient to leave his bed, varies a good deal. He may generally do so in from four to six weeks, but you should examine the part, and satisfy yourself as to its condition, before giving him permission to get up. The limb is generally so weak that he has no disposition to bear upon it for some time longer; and this weakness is not confined to the newly united bone, for the muscles participate in it, and the circulation through the limb is feebly conducted. The foot is blue, cold, and swells when it is hung down. The sores which may have been occasioned by the pressure of the splints, heal very slowly, and others are likely to be produced by slight causes. As the bone regains its strength, the muscles and the circulation generally resume their vigour; but they are sometimes very long in doing it. There was in the hospital some time ago a little child who did not recover the use of the limb for more than a year after a fracture of the thigh. She had been treated in the hospital. There was nothing remarkable in the case, and no reason to suspect any injury of the nerves. The bone also united in the usual manner. She, in course of time, got quite well, the cure being due rather to the kindly

efforts of nature than to any particular treatment. We likewise every now and then have a patient in whom œdema of a limb remains for a long time after the fracture is firmly united. The last imperfection which attracts attention, and this sometimes continues to give intimation of a weakened state of the limb for life, is a preternatural sensitiveness to atmospheric changes, which often amounts to pain. The patient is reminded of his former accident by uneasy sensations, or aching at the seat of the fracture during windy weather, or at the commencement of a thaw.

The joints in the neighbourhood of a broken bone often remain stiff for a considerable period, and the tendons are long in recovering the free play in their synovial sheaths. Some of these stiff joints which have been examined, were found to have undergone changes similar to those caused by inflammation; that is to say, the synovial surfaces were coated with lymph, united by adhesions, and, in a few instances, the articular cartilages were more or less extensively removed by absorption and ulceration. I do not mean to say that these changes always, or even commonly, take place, but it is well to be aware of their occurrence now and then, especially as they do not seem to be attended with the symptoms usually accompanying the inflammatory affections of joints. I do not know that you can facilitate the recovery of these joints by any other means than friction, bathing with warm water, active and passive movements of the limb, and the use of flannel.

A SUCCESSFUL

CASE OF CÆSAREAN SECTION, WITH REMARKS.

By THOMAS RADFORD, M.D., F.R.C.P., EDIN.,
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(Read at the Anniversary Meeting of the Provincial Medical
and Surgical Association, held at Worcester, August
1st, 1849.)

The subject of this case—Mary, wife of William Haigh—resides at Flats Fold, a mile from Ashton-under-Lyne, and about eight miles from Manchester. On my arrival, at half-past three o'clock p.m., I called upon Mr. Cluley, who accompanied me to the case, and with the greatest courtesy and candour, gave me as we passed along, the following particulars:—She had felt slight pains, according to the account of the friends, about a week, but Mr. Cluley thought that true parturient pains had only existed about three days, and which were so slight as not to require his interference. On this day, (Sunday, May 20th, 1849,) at nine o'clock, he was again called, and although the pains were still trifling, he made an examination per vaginam, but was unable to feel either the os uteri, or the presentation; he therefore had her taken out of bed and placed on the lap of a female friend, and again repeated his inquiry. The head of the infant was now felt, and the os uteri found dilated to the size of a half-crown piece. In this manner he unintentionally ruptured the mem-

branes. The pelvis, he mentioned, was considerably contracted. I found her lying on the right side. Pulse 120; tongue clean and moist; her countenance tranquil, but a little flushed. Her bowels had been freely and fully moved this morning; and she had also freely and duly urinated. She was helplessly fixed on her side, and when requested to turn, she remarked that she suffered very great pain when she made an attempt to do so, or was by another person turned on the back. The pelvis was very considerably altered from its natural shape: its sides were flatter; and the posterior division of the ilia, especially on the left side, projected backwards; and the upper portion of the sacrum and the lower lumbar vertebræ, had sunk in an inward and downward direction, so that a great concavity was perceived here. The uterus inclined rather to the right side, and stood considerably more forward than usual, although it had not assumed the retort form to the same degree as I have witnessed in former cases; its tissue felt soft and compressible. The fundus or upper division of the organ was fluctuant, and rounder in shape than it generally is after the discharge of the liquor amnii, which led me to conclude that a great portion of this fluid still remained. This opinion was corroborated when I attempted to ascertain the position of the infant through the abdominal parietes, for at the lower or cervical portion of the uterus, from whence it was presumed the fluid had escaped, the projections of its body could only be felt.

By a vaginal examination I found the lower aperture of the pelvis very considerably diminished by the close approximation of the rami of the ischia and pubes which nearly destroyed the arch, and by their jutting forward there remained only a narrow slit, which would not admit the point of the finger. In the transverse diameter, two fingers could only just be placed between the tubera ischii, the antero-posterior diameter was also much shortened by the coccyx and the lower part of the sacrum being considerably incurvated. This great diminution in the outlet rendered it difficult to measure the brim, so that it was necessary to carry the hand very far backwards to accomplish it. Its figure was tripartite, or composed of three divisions. This alteration in the brim was occasioned by the falling downwards and forwards of the upper part of the sacrum, and the lower lumbar vertebræ which inclined a little more to the left side, and by the body of the ossa pubis and ischii being forced backwards and inwards, and by the jutting forwards of the symphysis and rami of the pubis. The measurement of the widest part of the conjugate diameter, in the two lateral divisions, did not exceed an inch and a half; I could only place two fingers, one lying a little over the other. The anterior division was not more than half an inch in its widest part, as it would scarcely admit one finger edgeways. The length of this narrow opening is not relatively available in practice. In the transverse diameter of the brim I could just place three fingers, parallel with each other. The external genitals were free from tumefaction, and the vaginal lining was moist, and of a natural temperature. Whilst lying on her side I was unable to feel either the os uteri or the presenting part of the infant, but on placing her on her

back, (which occasioned her great pain,) the os was felt to be dilated to rather more than the size of a shilling. She had not felt the movement of the infant since the morning, but by the stethoscope I satisfactorily heard the pulsations of its heart, which fact Mr. Cluley afterwards corroborated.

With my opinion as to the position the Cæsarean section ought to take in obstetrics, I at once concluded that it was the only operation which was justifiable, and indeed capable of giving the best chance of life to both mother and infant. Mr. Cluley most cordially acquiesced in this opinion. We now informed her husband of the nature of the case, and the means to be adopted. He answered, "if nothing else would save her;" he willingly submitted to any plan we considered right. When a similar communication was made to the poor woman, she received it with the greatest resignation; it was unaccompanied by either mental or physical disturbance. At Mr. Cluley's request, Dr. Lees, Messrs. Hunt, Gibbons, Galt, and Brewster, were present at the operation. Before the incision was made, I was anxious as far as possible to ascertain where the placenta was located, and I therefore placed my ear over the left division of the uterus. From the negative evidence, I concluded it was not fixed on this side of that organ. Mr. Cluley adopted the same plan, but thought he heard the placental "soufflet." I again applied my year, and still heard nothing. Dr. Lees tried, and considered the sound to arise from the friction of the ear on an interposed piece of lint. Mr. Cluley after a second trial, agreed in my opinion. I therefore suggested the left side of the linea alba as the proper situation to make the incision. I now raised the fundus uteri, and Mr. Cluley divided the abdominal integuments on the left side of the umbilicus, to about six inches in extent, from which very little blood was lost. An opening was now made into the uterus by a scalpel, which was further extended upwards and downwards by the probe-pointed bistoury. At this stage some little bleeding took place from the divided sinuses; and there was also a considerable discharge of liquor amnii. I now, as quickly as possible, introduced one hand into the uterus, over the infant's hip, and fixed the fingers under the flexed thigh in the groin, and having placed the other hand on the opposite side of its breach, I extracted it vigorously alive. During this manœuvre the uterus strongly and regularly contracted. The funis was now tied and divided by one of the gentlemen present. Afterwards I seized the funis with one hand, and with the other readily detached and brought away the placenta, which was fixed on the right latero-posterior surface of the uterus. There was some blood discharged, but not more than frequently happens after ordinary or natural labour. Several convolutions of intestines, with a portion of omentum, now protruded, which had up to this time been supported and effectually restrained under the abdominal parietes, but they were readily returned. I carried my finger round the wound to ascertain if any portion of these viscera had descended into the uterus. The integuments were brought into proximity, and held together for a short time by a hand placed on each side, and as there was no further discharge of blood

ligatures were inserted at an inch distance from each other. Mr. Cluley used a long needle, with a scalpel-like handle, for this purpose, which admirably answered. It is much superior to those in ordinary use. Straps of adhesive plaster were laid across the wound, and on each side a compress of lint was placed, and over all a bandage, just tight enough to give a firm support.

During the whole time her mind was calm, she never even uttered a complaint. She remarked that her sufferings during the operation had been much less than what she had endured previous to it. Pulse from 80 to 90 in the minute. Tinct. Opii, dr. iss., administered.

Half-past seven.—Pulse 100 to 120; dosing; there was no hæmorrhage or vomiting; had taken some gruel. Ordered mucilaginous beverages and farinaceous diet. At a later hour the same evening Mr. Cluley saw her, and found a little abdominal uneasiness. She had slept, and had a lochial discharge.

May 21st. Monday, half-past two P.M.—Pulse 130; tongue moist; face less flushed; abdomen tympanitic, and slightly painful; fresh and plentiful lochia; bowels not moved; five ounces of water drawn by catheter. Continue mucilaginous drinks, &c. An enema of warm water to be administered in the morning.

22nd. Tuesday, half-past nine A.M.—Mr. Cluley had ordered forty drops of Tinct. Opii to be taken at bedtime. She had several times vomited a dark coloured fluid during the night, and she still continues to do so; pulse 120; abdomen tympanitic, but not tender; tongue slightly furred; lochia natural; bowels still unmoved. After loosening the bandage, there was a discharge of sanious matter. Ordered an enema, with Ol. Ricini, oz. j.; Spt. Terebinth., oz. ij., &c. To take Ext. Col. Co., gr. x.; Hydr. Chlorid., gr. ij.

23rd. Wednesday, half-past nine A.M.—Hiccough has been troublesome; has bilious vomiting; tongue brownish; pulse 120; has a burning sensation in the throat, and the side of her mouth is excoriated; she says she tastes the turpentine which was given in the enema; bowels not moved. Ordered Sodæ Sub. Borat, dr. ij., Aq. distillat., oz. iij.; Mist. Acaciæ, oz. iij.; Capt., oz. j.; tertiis horis. Gum-water to drink. To have an enema, with three ounces of ox-gall and a pint of water.

24th. Thursday, half-past nine A.M.—Symptoms continue the same; but the tongue is slightly aphthous; two enemata were administered, which produced two small scybalous stools; wound much lessened in size, but its edges are flabby and have not united; ligatures still firm. To continue the same plan; to have the ox-gall enema repeated.

25th. Friday, half-past nine.—All the symptoms better; has had free alvine evacuation. The integuments over the sacrum are inflamed and excoriated, and have a tendency to slough. To continue the same means; ordered warm water enema. The parts over the sacrum to be dressed with collodion; warm water to be injected per vaginam into the uterus.

26th. Saturday, half-past nine A.M.—Tongue red and clean; bowels twice freely opened; has vomited several times since yesterday; wound granulating and looking well. To continue the same plan.

27th. Sunday, nine A.M.—Had suffered from occasional deafness and tinnitus aurium yesterday. This morning she is not so well. Pulse 125 and tremulous; the tinnitus aurium and deafness still continue; has numbness of one arm and leg; the bowels not moved. To take a little milk, to have a warm-water enema administered, and afterwards one of milk. To take Ammon. Sesqui Carb., if required.

28th. Monday, half-past nine.—Yesterday not so well; had delirious rambling. Pulse from 120 to 130; great restlessness and tossing about; was low in spirits; seemed much weaker; the bowels were moved; has taken the ammonia. She is much better this morning and has had some sleep. The wound was patulous and from it a dark-coloured and fetid fluid escaped. To continue milk diet; warm water to be thrown per vaginam into the uterus.

29th. Tuesday, half-past nine A.M.—All the symptoms are better; the wound is filling up by granulation; one ligature came away. The bandage was wet from the water which had been injected per vaginam into the uterus escaping through the wound. Slough over the sacrum came away, and the sores are looking well. Collodion to be again applied; to have a warm-water enema first, and afterwards one containing ox gall if required.

From the above date, up to June 7th, nothing occurred in the character of the symptoms to require particular comment. She continued progressively to improve. The wound gradually filled up by granulation, and it is at this time nearly healed. The fistulous opening, through which the water, which had been injected per vaginam into the uterus, had escaped, is now completely obliterated. The sores over the back part of the sacrum, and on the nates, are also quite well.

During this period the diet chiefly consisted of milk, but towards the end of it animal food was allowed once a day. The mucilaginous mixture, with Sodæ Sub Boras, was the only medicine which she took, except the gum-water. When the bowels required relief, an enema of warm water was first administered, and if necessary, this was followed by one containing ox gall. The collodion was continued as a dressing to the raw surfaces behind, until the latter part of the time, when pads of cotton, with a mild unguent, were substituted. During my absence from Manchester I received favourable reports of the patient from Mr. Gibbon, under whose professional care she was placed, in consequence of Mr. Cluley's severe illness. In his last letter, dated June 18th, he says:—"The wound is very healthy but not quite healed."

June 26th. Tuesday.—I visited her along with Mr. Cluley and found her down stairs and looking very well; she remarked she was in excellent health. On removing the dressings we found two or three spots of exuberant granulations, which only required the application of Argent. Nitras. and a little dry lint.

July 15th, Sunday.—I called on Mrs. Haigh. She was looking extremely well and in excellent spirits. She observed that she was better, and could walk with more ease to herself than she could have done for a long time before the operation; the wound was quite healed.

It was a great object with us, that the infant's life should be preserved, we therefore strenuously recommended a wet nurse, and if one could not be obtained, then, that it should be supplied with asses milk; but from unavoidable circumstances, neither were procured until its life was placed in great danger. All those mischiefs consequent upon dry nursing appeared; such as bowel affections, a threatening of marasmus, and convulsions. At length a nurse was obtained, after which the infant improved, and on this day is quite well.

Before I proceed further, I take this opportunity of mentioning, that the surgical part of the operation, was most skilfully and dexterously performed by Mr. Cluley; and his punctual, assiduous, and unremitting attention to the patient, are highly honourable to him. To him I am personally indebted, and return him my sincere thanks for his uniform great kindness and courtesy.

REMARKS.—Mary Haigh was occupied before her marriage as a domestic servant, and was then strong and capable of undergoing great exertion. She is of a sanguineo-lymphatic temperament; her skin fair, with a red blush on the cheeks; her hair of an auburn or reddish-brown colour; the tint of her eyes is rather peculiar, being of a brownish grey, and they have an animated expression. Her father is now living and very healthy. Her mother has been dead many years, and most likely her death was occasioned by some chronic disease of the vertebræ, as I understood she was afflicted with abscess in the back.

Our patient is thirty-one years of age, and has been married nearly nine. During this period she has had five children. The labours of the first four were natural and quick; the last of this number happened three years ago, and was so rapid that the infant was born before the obstetrician arrived. After the birth of the second, she was rather more delicate and suffered a little from indigestion; and about five or six years since first complained of slight rheumatic pains about her hips. Two years since she was confined to bed for a short time, by pains about the pelvis; but she gradually recovered, and afterwards was able to walk about tolerably well. Her general health remained the same up to the period of her last pregnancy. She was now observed to limp a little when she walked, and to be less in height.

During her gestation her progression was more difficult, and her gait more waddling. She also complained more of pelvic pains; and the diminution in her stature now evidently increased. Mollities ossium, the disease under which she suffered, usually commences during pregnancy, and generally becomes suspended in the interval, returning in an aggravated form in each successive pregnancy, until its ravages have completely destroyed the form of the pelvis. In this case, however, it did not exactly pursue this course. There is no doubt there existed a strong predisposition to the disease—most likely hereditary; and probably the disease began at the latter part of the second pregnancy, but evidently no great, if any mischief, was done to the pelvis at this time, or for a

long time after this period, as the third and fourth labours were so rapidly and easily terminated. The rapidity of its progress is remarkable; for there is little doubt that the great degree of distortion took place immediately before and during the last pregnancy. Sometimes in this disease, the bones are so soft that they yield, when the hand is introduced to make an examination. This happened here, as Mr. Cluley thought he felt a giving way of the bones when he examined the pelvis.

Sometimes the pelvic bones, when affected with this disease, yield during labour, when the infant is drawn through. Three cases of this kind have occurred to my knowledge, one of which is detailed in the *Provincial Medical and Surgical Journal*, 1847, p. 706.

Opium is usually given after great operations to lessen the shock on the nervous system, but in the present instance we had no evidence that such an effect existed, and therefore on this account the drug might have been omitted. A second dose was administered by Mr. Cluley, to which he attributed the vomiting which afterwards occurred. He considered that it had produced an effect similar to that which follows a debauch. It most likely constipated the bowels, but there is no doubt that this was chiefly caused by the bowel being compressed between the bulky uterus and the projection of the lower lumbar vertebræ and promontory of the sacrum. The garrulous delirium, the convulsive twitchings, and tinnitus aurium, &c., were considered by Mr. Cluley to depend on a state requiring more support, we therefore agreed to give a milk diet, and as its effects were so satisfactory, it was continued to the end.

The negative system of treatment here pursued considerably contributed to the well-doing, both of this case and also of the one in which I was concerned along with Mr. Goodman. I have also observed the same plan, most beneficially carried out, in the after-treatment of abdominal sections for the extirpation of large ovarian tumours. There are great objections to the use of purgatives after these great operations, as the mucous membrane of the bowels is so readily disturbed, we therefore only ordered two doses of pills, and trusted chiefly to the use of enemata. The ox-gall enema was decidedly beneficial.

Before the incision was commenced a question was put to me by one of the gentlemen present, whether it was considered necessary to administer chloroform? I answered in the negative. I objected to its use on two grounds,—1st, because it was unnecessary, she possessed in such a high degree tranquility, calmness, and resignation of mind. Moral courage is superior to anæsthesia. 2nd, our experience of it in this operation is limited, there being at that time only one case published, in which this plan had been adopted, and that an unsuccessful one.—*Vide Lancet*, Vol. i., p. 139, Feb., 1847.*

Since then another fatal case of Cæsarean operation, in which chloroform was used, has been detailed by Mr. John Campbell.—*Vide London Medical Gazette*, Vol. xliii., p. 1105, June 22nd, 1849.

Rupture of the membranes, and evacuation of the liquor amnii, a long time before the operation, is always to be deplored; but although this accident had happened here, yet the great bulk of this fluid was still retained in the middle and upper portion of the uterus, which felt fluctuant and round in shape, and which admirably prevented the contraction of this organ, and so thereby lessened the chance of mischievous pressure on the maternal structures, and also contributed to the safety of the infant, and rendered its extraction more easy. The length of the uterine wound was also thereby diminished, in a degree proportional to the difference in the measurement of the uterine tissue, when distended by the contained fluid, and after its evacuation, when shortened by contraction.

The dangerous results of protracted labour are to be found in all the published cases of this operation, which have had a fatal termination, and which ought never to be allowed to occur in any cases of labour in which such a degree of deformity exists as to require its performance. In the present case, happily, the water was not evacuated until a short time before the operation, and then only very partially; the pains were also fortunately so slight, that no injurious pressure was made.

Fæcal accumulation generally takes place during ordinary pregnancy if great attention be not paid to prevent it; but in cases of distortion of the pelvis, this is much more likely to happen, from the mechanical impediment offered by the unnatural projection of the promontory of the sacrum, and lower lumbar vertebræ, and also from the anterior, oblique, and flexed position of the body and fundus uteri, which throws the cervical and oral portions of this organ backwards. The interposed rectum is thereby compressed, and the passage of the fæces interrupted.

The evils of a neglected state of the bowels are not felt so much during pregnancy as they are afterwards, in the puerperal state, and which in some cases lead to a fatal result. It must be quite obvious then, when we contemplate an operation, such as the Cæsarean section, that the bowels should be first unloaded; and if this has not been fully and naturally accomplished, an enema, consisting of a large bulk of warm water, should be administered. In the present case the free evacuation by stool contributed to her safety.

Medical and Surgical Association, in his "Report upon the Use of Chloroform in Fifty-six Cases of Labour." He says,—“If given in large quantities, or if persevered in too long, it puts a stop to all muscular action. This is contrary to the opinion of Dubois, who states that it never destroys the uterine contractions, or those of the abdominal muscles.”—*Vide Dublin Journal of Medical Science*, No. xv., p. 107. August. 1849. Notwithstanding the high authority of Dubois on this subject, Dr. Denham's numerous facts are sufficient to induce us to believe in his opinion, and if it be the case that chloroform does interfere with regular uterine contraction, we ought not to have recourse to it or any other means which act in this manner, in cases of Cæsarean section.

* In addition to the above objections to the use of chloroform in cases of Cæsarean section, I quote one of the conclusions drawn by Dr. Denham, which I have met with since my paper was read before the members of the Provincial

The aid derived from auscultation, to detect whether the child be living or dead, is most valuable, but not more so than the evidence it furnishes us as to the location of the placenta. It is of the utmost importance to avoid, if possible, cutting into this organ, for if it should happen that it is fixed on the portion of the uterus incised, there is some risk of hæmorrhage, and it may lead to irregular contraction of the uterus, and so become an obstacle to the speedy and safe extraction of the infant.—*Vide* case by Dr. Henderson, *Edinburgh Medical and Surgical Journal*, Vol. lv.; also case by me *ibid.* Vol., p. 67, case 2nd.

The same accident happened again in my unpublished case. Happily in the present case we determined on the site for the incision, which was free from placental attachment; and it is remarkable how regularly the uterus contracted. The analytical tables of all the Cæsarean operations performed in Great Britain and Ireland, which were laid before the profession in 1843, with those added which have since occurred, furnish important data on several practical points; they would, however, occupy too much space to introduce here. One inference to be drawn from them shall be mentioned. It is the black account, or the great maternal mortality shewn to arise from this operation. Out of fifty women operated upon, five only have been saved. At the present time it is not my intention to inquire into the validity of these five cases. The statistics of the results of this operation thus appear very unfavourable, and if abstractedly considered, are quite enough to deter us from its performance. But before we condemn this expedient, we ought carefully to analyze each case; to ascertain what proportion of the fatal issue is really attributable to it; what part is assignable to the constitutional or local state of the patient; what is due to the length or the influence of the labour itself, or its management; and at what period, and how, it was performed. All these subjects have received my serious attention, and, as far as possible, each individual point has been faithfully recorded by me, and the deductions truthfully stated to the profession. I will now place before you the result of five cases which have occurred to me:—

	Saved.	Lost.
Of the five women operated upon ..	2	3
Of the five infants extracted.....	2	3

One of the women who died had been in labour thirty-four hours; the membranes were ruptured two hours afterwards; pulse 150 in the minute, and feeble; repeated vomiting; had great tenderness in the belly, which was considerably increased by pressure; great thirst; tongue furred and dry; great anguish expressed in countenance; external genitals much swelled; vagina hot, dry, and rough. On withdrawing the hand an odour was perceived from it similar to that which takes place from partially decomposed animal matter. The movement of the infant had not been felt for some time, and its heart could not be heard by the aid of the stethoscope. When extracted it was dead. In another of the cases which occurred, the woman had been in labour and the membranes had been ruptured twenty-two hours; pulse 130; skin hot; tongue furred;

thirsty; pains very frequent; had great tenderness in the belly, which was considerably increased by pressure. The infant was alive, but was destroyed by being spasmodically seized around the neck by the uterus.—*Vide* *Edinburgh Medical and Surgical Journal*, Vol. lv., p. 67.

In the third case the duration of labour was fifty-three hours, and the membranes had been ruptured fifty hours; abdomen excessively tender; fetid discharge from vagina; pulse 130, irritable and weak; bowels had not been moved for several days; frequent vomiting; skin hot; great thirst. The incision being made, the intestines were exposed and much inflamed; there was some serous effusion of a red colour in the belly; peritoneal coat of the uterus injected. The infant had not been felt by the woman to move, nor could the pulsation of the heart be perceived by the stethoscope. When drawn out it was putrid.

From the above statement of the condition before the operation, of the three women who died, we are warranted to conclude that their deaths were not attributable to the operation. We have in all of them indisputable evidence that the mischief was occasioned by protracting it, more especially in the two last-mentioned cases.

Of the three infants extracted dead,—in that of the first case we have every reason to believe it was so before the operation, as it was not felt by the mother, nor could we hear the pulsations of its heart. In that of the second case, it was alive, and its death is no doubt chargeable to the operation, but it was produced by a cause which I think may in general be avoided, or at least guarded against. The third to be accounted for was already dead and putrid.

Notwithstanding the unfavourable aggregate results of the Cæsarean section in Great Britain and Ireland, I think, from my own experience, shewn in the above statements, I am justified in advocating it as an operation of election, not merely having recourse to it as one of necessity, according to our present obstetric rule, when no other means can suffice, but to give it a preference over the use of the crotchet, in cases when neither premature labour, the long forceps, these two operations combined, or turning, will meet the exigencies of the case. I am a warm, and I hope a sincere, advocate for its adoption, and doubt not but if it is early and properly performed, and if the after treatment is judicious, it will be even more successful than it has been in my hands.

The maternal mortality will thus be considerably reduced, and will bear a comparison with that of other capital operations, provided a just calculation be made of all contingent and relative circumstances existing in each case. The number of deaths will no doubt then fall considerably under those occasioned by the use of the perforator and crotchet, although it is now stated to be the reverse, but the truths of which statement I have great reason to doubt. The results to the mother, in all cases of the Cæsarean section, are known; but those after the use of the crotchet are buried in oblivion, the grave telling no tales. The child's rights are maintained by the former, for if living, it may be extracted alive, but by the latter it is necessarily destroyed.

CLAIM TO PRIORITY OF THE
APPLICATION OF NITRATE OF SILVER IN
ULCERATION OF THE LARYNX.

By JAMES BEDINGFIELD, Esq., Surgeon, Stowmarket.

(Read at the Suffolk Branch Meeting, held at Hadleigh, Friday, June 15th, 1849.)

In a recent number (May 16th, 1849,) of the *Provincial Medical and Surgical Journal*, there is a very interesting and instructive case of "Ulceration of the Larynx," from the pen of Dr. Fletcher, of Birmingham. In all its details, both prior to the dissolution of the patient, as well as in the appearances found after death, this case bears a very striking resemblance to some cases published by me, in the *London Medical Repository*, so far back as the year 1814, and afterwards in my "Compendium of Medical Practice," pages 81 to 93 inclusive. The remedy proposed for the cure of this formidable destructive disease is also the same as that suggested by me. This disease, I believe, proves uniformly, sooner or later, fatal; but this fatality is not to be attributed so much to the want of, or efficiency of, a remedy, as to the difficulty in its application. The mice, after a long consultation, proposed to put a bell about the cat's neck, and a most admirable device it was; but then there was great difficulty as well as great danger, in carrying this operation into effect. I suggested the application of nitrate of silver to the ulcers, and a most efficient remedy I am still inclined to think it would be found, but then there is great difficulty, as well as great danger, in performing the operation. The nitrate of silver, to be successful, must, I apprehend, be applied in substance, not in solution. To make an opening in the trachea, and apply the substance directly to the ulcers, as proposed by me, would be an exceedingly hazardous, although, considering the uniform fatality of the disease, when left to itself, not altogether unjustifiable proceeding; to apply it in substance in the manner proposed by Dr. Horace Green, of New York, will, I fear, be impossible. I ground my opinion of the inefficiency of the solution upon the little benefit I have derived from its use in uterine affections; but when applied in substance its effects have been almost magical. But even in a state of solution the nitrate of silver is said to afford great relief, and in so harassing a disease this is no trifling consideration. Instead of fastening the saturated sponge to a piece of whalebone, I would suggest that it should be attached to a hollow tube, pervious at both ends; for although an extraneous body thus introduced into the trachea must necessarily be very exciting, the introduction of an open tube would secure a free respiration. A large elastic male catheter, containing a piece of wire so bent as to give the instrument the requisite curvature, would probably answer the purpose. The root of the tongue might be depressed by a pair of forceps bent at right angles, with which I have frequently succeeded in removing extraneous bodies, both from the pharynx and meatus auditorius externus. The blades slightly separated, so as to pass on each side of the epiglottis, into the pharynx, would, perhaps, be found more

convenient than the rectangular spatula recommended by Dr. H. Green.

I shall conclude these observations by offering for your inspection a specimen of this disease; and which will convey a much more accurate idea of its formidable and destructive character than can be given by any verbal description. It is the case of Sarah Hopkins, which you will find in my "Compendium." The appearances are thus imperfectly sketched by me:—

"The rima glottidis was very much contracted, and the epiglottis abraded upon its sides and concave surface. An ulcerated surface, commencing at the superior and posterior part of the larynx, extended downwards to a small distance below the ventricles of Galen. The trachea was filled with purulent matter. Upon this being sponged away, an extensive and deep ulceration was discovered upon its posterior part, about half an inch below the inferior aperture of the larynx. About one quarter of an inch below this, upon the anterior part of the membrane, another ulcer was situate. This ulcer spread in a circular direction, and nearly embraced the whole circumference of the trachea, for the space of one-third of an inch. In short, the whole surface of the trachea was more or less destroyed by the disease to within half an inch of its division into the bronchi. Upon this small portion there were slight traces of inflammation, and its follicular structure was very apparent. The membrane lining the bronchi was highly vascular, but no disease existed in either the lungs, heart, or abdominal viscera."

With respect to the nitrate of silver. It is not a matter of high importance by whom its use, in ulceration of the larynx, was first suggested. That honour—if honour there be—is claimed by Dr. Fletcher, for Dr. Horace Green, of New York. Some German physician, whose name I do not at this time recollect, has recently proposed this method of treating the disease, and claims the proposition as originating with himself. Let dates decide the question. It was first proposed by me in the year 1814.

COMPOUND DISLOCATION AND REMOVAL
OF THE ASTRAGALUS.

By R. S. NUNN, Esq., M.R.C.S., Surgeon to the Essex and Colchester Hospital.

(Read at the Suffolk Branch Meeting of the Provincial Medical and Surgical Association, held at Hadleigh, June 15th, 1849.)

On the 23rd of January last I was called by my friend, Mr. Symmons, of Bures, to see a patient of his who had met with an accident. I found on my arrival that he was a farmer, of stout strong build, with florid complexion, and having every appearance of robust health. On inquiry, I learned that he had been thrown from his cart, whilst travelling at a moderate pace, and had fallen upon the side of his foot, and that upon attempting to rise and stand, he found he was unable to do so. He was carried home, and Mr. Symmons, on visiting him, discovered the stocking protruding through a cut in a strong top-boot, just below the

external ankle. He cut the boot off, and removed the stocking, when the *astragalus* dropped into his hand, held only by a few fibres of the internal ligaments. These were easily divided by a pair of scissors, and the bone taken away. The wound caused by the dislocation of this bone extended from the anterior part of the ankle, running in a semi-circular form round to the back of the tibia, and left free room for the introduction of the fingers, and for the careful and complete examination of the joint. The vacuum occasioned by the absence of this bone was distinctly traced, and the ends of the *tibia* and *fibula*, with their attachment to each other, clearly felt, but there was no fracture of either *malleolus*, and no apparent displacement of the bones connected with that most complicated joint. There were at this time no constitutional symptoms, and but little pain or irritability. The leg was placed in a simple fracture box (the foot being restrained to the proper position,) a poultice applied to the wound, and a dose of calomel with a saline aperient administered; the lowest diet, and most perfect quiet were prescribed.

25th.—Had passed a tolerably good night; pulse 90; bowels freely relieved; but little pain in the injured limb; a slight appearance of inflammation round the wound. Apply twelve leeches and continue poultices, saline medicines, and barley water.

26th.—Has again slept well; but little increase of pain; healthy suppuration commencing, but still a slight blush of inflammation. Repeat the leeches; cold lotion to the leg, and poultices to the wound. To have a saline aperient, and continue the febrifuge medicine. Pulse reduced to a little more than 80.

I saw him again on the 28th, when no worse symptoms appeared, but the leeches were still applied daily, as occasional evidences of inflammation were present; but he suffered little pain, Mr. Symmons having visited him twice a-day, and himself watched the position of the leg, and applied the poultices, so as to insure the foot not being displaced during that operation. He continued to improve daily; and when I saw him again on the 28th of February, his health was perfectly good, all signs of inflammation had disappeared, the granulations of the wound were perfectly healthy, the suppuration sufficient and good, and he was able to raise his foot without assistance. The foot, however, was slightly bent inwards, but this was gradually diminishing, and the shortening of the leg proved that the healing process was going on, and that the approximation of the extremities of the *tibia* and *fibula* to the anterior portion of the *os calcis* was taking place. From this time to the present he has been gradually improving, and is now able, by the aid of sticks, to walk about the house, to get into his gig, &c. There is increasing motion in the joint, and he can bear almost the entire weight of his body on the injured part. The leg is shortened by an inch (just about the thickness of the *astragalus*); and I have no doubt that granulations have sprung up from the periosteal surface of the tarsal end of the *os calcis*, which are gradually becoming condensed, and which will form a semi-cartilaginous bed for the ends of the *tibia* and *fibula*.

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF PROFESSOR SANDS COX, F.R.S., SENIOR SURGEON TO THE HOSPITAL.

Reported by Mr. PETER HINCKES BIRD, late Resident Medical Officer.

CASE XXIV.

STONE IN THE BLADDER.

Francis Weaver, aged 5, was admitted into the Hospital under the care of Professor Sands Cox, on the 10th of March, 1847.

His mother states that he has been ill about eighteen months, labouring under symptoms resembling those now present, but not so severe. He has been under medical treatment for some time.

Present state.—He is emaciated, and his countenance is pale; he is constantly pulling the prepuce, which is elongated, and he complains of pain in the penis, to relieve which he rubs his belly against the bed. The pain is generally worse at night and causes him to scream out; his urine dribbles away at times, especially in the night. The urine, on examination, has an acid reaction, and presents nothing abnormal when examined microscopically. Appetite pretty good, bowels open, tongue clean. On the introduction of a sound a stone was at once detected.

R. Potass Bicarbon, dr. iss.; Infus. Gentianæ, oz. viij.; Capiat, oz. ss. ter die.

March 12th.—Seems rather better; pain is easier since he has taken the above medicine; appetite good.

15th.—The lateral operation was performed by Professor Sands Cox this morning and a small calculus was extracted in less than half a minute after making the first incision. The stone was of an oval shape, its exterior was rough, and of a light clay colour; it weighed two drachms. The little patient was placed under the influence of æther previously to the operation.

Nine o'clock P.M.—Feels pretty comfortable, the urine passes through the wound.

16th.—Slept well; complains of thirst; pulse 96; tongue furred; bowels open; wound looks healthy, but the urine still passes through it.

Sumat Mist. Salinæ, oz. ss., quartis horis.

18th.—Doing well; appetite returning; a small quantity of urine passed through the urethra this morning.

20th.—Most of the urine passes through the urethra; the wound is closing by granulation; sleeps well; health much improved.

30th.—Wound quite healed, appears quite well. Discharged.

Examination of the Calculus.—*Physical Characters*—The calculus was of an oval shape, and weighed two drachms, its exterior was of a clay colour and mammillated. Its section presented a nucleus and three dis-

tinged layers. The first layer, (the most external) was of a reddish brown colour, laminated but not distinctly so; the second layer was of a clay colour, and the line of separation between it and the previous layer was therefore very distinctly seen, it was not laminated; the third layer (the most internal) consisted of stræ of a darkish brown colour, arranged in an irregular manner (like fortification agate) containing between them stræ of a lighter colour and of a more regular arrangement. The nucleus was round, of a yellowish brown colour, and of a laminated structure.

Chemical Composition of the Nucleus.—A small portion of the nucleus, treated on a platinum foil by means of the blow pipe, first became blackened, developing an odour resembling that of burnt horn, and left a small quantity of a white ash, which had an alkaline reaction. On treating a minute portion with nitric acid, diluted with half its weight of water, it dissolved with effervescence, and on evaporating to dryness it presented a beautiful pink colour, which on exposure to the fumes of ammonia, assumed a purple hue. On digesting a little of the powdered nucleus in boiling water, a portion was dissolved. Hydrochloric acid was added to the clear solution; there subsided crystals of uric acid. After the subsidence of these crystals, three drops of the acid solution (*a. b. c.*) were placed on thin strips of glass, and examined under the microscope in the following conditions:—

On evaporating a drop of the clear solution (*a.*) to dryness, there were presented by the microscope numerous acicular crystals, arranged in groups and ramifying clusters—chloride of ammonia shewing the presence of urate of ammonia. To the liquid (*b.*) was added a drop of bichloride of platinum; a precipitate of yellow octohedra ensued, insoluble in water, shewing the presence of potass or of ammonia, or of both together. After evaporation to dryness, no cubes could be detected, which would have been the case had soda been present, from the formation of chloride of sodium. To the liquid (*c.*) previously neutralized by a drop of ammonia was added oxalate of ammonia; there resulted a granular precipitate, consisting of amorphous granules, which, when examined under a microscope of high power, were observed to be mixed with minute octohedra.

The third layer (most internal).—On applying heat to a particle on platinum foil, there was left after combustion, a bulky white residue, (carbonate of lime,) which dissolved with effervescence in acetic acid, and from the acid solution thus obtained, a white granular precipitate was thrown down by oxalate of ammonia. A second portion of this layer was digested first in boiling water, afterwards in caustic potass; the greater bulk remained undissolved. The clear fluids were subsequently treated with hydrochloric acid. There were deposited microscopic crystals of uric acid. This layer, therefore, consisted of oxalate of lime, urates which were dissolved in boiling water, and of free uric acid, unacted upon by boiling water, but dissolved by potass.

The second layer.—A particle examined before the blow pipe, was almost completely consumed, crackling during combustion, and evolving an odour of ammonia—

on treating which with potass, ammonia was liberated, and was recognized by the fumes developed on exposing to its influence a glass rod, moistened with hydrochloric acid, by the odour, and by its restoring the blue colour or reddened litmus. This layer was almost entirely soluble in boiling water; the residue was dissolved by caustic potass. Upon placing a drop of the aqueous solution on a slip of glass with hydrochloric acid, there were formed crystals, having the microscopic characters of uric acid, shortly followed by needles and feathers of chloride of ammonia. On treating the alkaline solution (of the residue) in a similar manner, uric acid crystals were also obtained. This layer consisted, therefore, of urate of ammonia, with a small proportion of free uric acid.

The first layer (most external).—The product under the blow pipe closely resembled that of the last-described layer. On treating with potass, fumes of ammonia were evolved, and it was partially dissolved by boiling water, but to a less extent than the last layer; and on treating the aqueous solution in a similar manner, corresponding results were obtained from the portion unacted upon by boiling water. The greater part was dissolved by caustic potass; and from this solution, treated by hydrochloric acid, were also deposited crystals of uric acid. The residue, after the action of water and potass, was dissolved by hydrochloric acid, and appeared to consist of the phosphates, but the proportion was too minute for examination.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, AUGUST 22, 1849.

In whatever point of view the recent anniversary meeting of the Provincial Medical and Surgical Association be considered, it cannot but be considered as a matter of congratulation to those who have the prosperity of the Institution at heart. Not to speak of the numbers and respectability of the members assembled, which equalled or surpassed those of any previous meeting, or the interesting fact of its reunion in the locality of its birth, and under the presidency of its founder and most energetic supporter, there was much cause for satisfaction, both in the retrospect of its operations during the past seventeen years of its existence, as well as the actual proceedings of the occasion itself.

Although, as the President observed in his introductory oration, the Association did not boast of having compassed the discovery of a Newton, yet it may be fearlessly asserted that in no one of the purposes for which it was

established has it utterly failed, while in the large majority it has been productive of most satisfactory results.

As far as the literary exertions of the Association are concerned, independently of the general value of the communications, we might refer with peculiar gratification to some of the more elaborate memoirs from time to time presented,—as for instance, those of Mr. Ceeley "On Vaccine," Dr. Addison "On Inflammation and its Allied Phenomena," Mr. Crosse on "Inversio Uteri," and more recently, Mr. Nunneley "On Anæsthetic Substances." A familiar acquaintance with the periodical literature of most countries enables us to assert without fear of unbiassed contradiction, that these may be taken as examples which may fairly challenge criticism.

In vindicating, however, the claims of this Association on the point of literary merit, we have stated but a small portion of its benefits. How great is the moral and ethical influence which the intercourse it promotes has exerted! It may be a delusion, but we have often fancied that among the motley ingredients of which our profession is composed, we could recognize the member of the Provincial Association by his courtesy, his indisposition to malign, and his willingness to palliate the errors of his professional neighbour, as well as by his superior attainments; in a word, by the enlarged and liberal views which he has imbibed from intercommunication with kindred spirits, as well as from the silent but not less powerful influence of the principles which have ever been unshrinkingly advocated in this Journal. That this influence was extended and profound we have long known, but how extended we were to a certain degree ignorant, till we listened to the eloquent speech of Mr. Paget, at the anniversary dinner. Not only does the high moral tone assumed by the Association elevate and refine those whom it immediately embraces within its ranks, but it is extended even to their pupils. We have the authority of Mr. Paget, and no mean one it is, that among the crowds of students who annually flock to the hospital, of which he is so distinguished an ornament, those who have had the advantage of the surveillance of members of this Association are remarked for their probity, their industry, and their gentleman-like demeanour. The good qualities of the preceptor are in fact reflected upon the disciple. This is only what might be naturally expected from

what we know of the force of example on the mind of youth; but to have the fact expressed with the truthful energy it was, we take to be the highest compliment which has ever been paid to the Association, and may well make amends for a thousand-fold more calumny than the tongues of malice and envy have been able to utter. There is nothing indeed further required to prove the beneficial results which attend the operations of the Association, and from this testimony alone, it commends itself to the notice of the profession, as an instrument, by means of which its *morale* is more likely to be elevated than by any of the numerous systems of mere legislative reform now so eagerly sought after.

In conclusion, we would advert to the more amiable feelings which these annual gatherings foster and educe. No one can have witnessed the cordial salutation, the kindly expression, the heartfelt congratulation that another year has passed over the head of a friend, whitened it may be with age and toil, and left him still unscathed in mind and body, without marking in his own mind, how conducive is the stated interchange of greetings to the maintenance of social virtue; or can fail to return to his own more private sphere, with a heart more quick to feel and more ready to entertain the sentiments of brotherly kindness, and more softened to the infirmities of disposition and asperities of conduct, which the conflicting interests of life are too apt to engender. For ourselves we do not hesitate to avow that we have never left one of the meetings of the Provincial Medical and Surgical Association, without increased feelings of respect to the profession to which we belong, and a more profound love of the science to which it is our privilege to minister.

Reviews.

A Practical Treatise on Inflammation of the Uterus, and its Appendages, and on Ulceration and Induration of the Neck of the Uterus. By JAMES HENRY BENNETT, M.D., Member of the Royal College of Physicians, &c. &c. Second Edition. London: John Churchill. 1849. 8vo, pp. 528.

In his preface Dr. Bennett remarks, that though nominally a second edition, this is really a new work, and this assertion is fully borne out on a perusal of this truly admirable treatise. We find, in addition to the contents of the volume published in 1845, much

original matter, which is perfectly new to the profession, such as "the history of chronic metritis, and of the displacements which it occasions, of late years so erroneously viewed; of internal metritis, hitherto confounded with disease of the cervical cavity; of inflammation and abscess of the lateral ligaments in the non-puerperal state, never, as yet, described by any author; of inflammation and ulceration in the cavity of the cervix; of inflammation and ulceration in the virgin,—in the pregnant and puerperal condition,—in the aged; and in connexion with polypus and uterine tumours; and the section on the diagnosis of cancer."

So much has lately been written on the displacements of the uterus since the appearance of the various interesting memoirs, published by Dr. Simpson, that we are not surprised to find Dr. Bennett *reluctantly* express an opinion differing *in toto* from the conclusions of that gentleman, as to the cause of innumerable symptoms, local and general, which are attributed by him to retroversion of the uterus. Dr. Bennett, after entering at some length into this *vexata questio*, concludes in the following words:—"It will be perceived by the above details, that in my opinion retroversion of the uterus, like retroversion of the cervix, is merely a symptom of enlargement of the uterus, and that I almost entirely repudiate the symptomatology of recent writers on the subject. I think that in both forms of uterine deviation the great error has been committed of attributing to displacement the symptoms of the inflammatory diseases which accompany and cause it. At the same time I am perfectly willing to admit that the question is a difficult one to unravel, and that more extended investigation, both on my own part and that of others, is necessary, before the question at issue can be considered *in every respect* definitively settled. It is certainly of great importance that the real value of these uterine displacements be correctly ascertained, as should the mechanical school—which is now gaining ground, and which appears to consider the womb as a joint, capable of being dislocated backwards and forwards, to the right and to the left—become generally adopted, there seems no limit to the sufferings that will be inflicted on females by the pernicious application of mechanical principles to the treatment of uterine disease."

Our own experience would certainly lead us to agree with Dr. Bennett, as we have seen so many cases of displacement without ill effect, as to warrant us in rejecting it as a *common* cause of the symptoms which are assigned to it, but we hope that before the third edition makes its appearance, the subject will be still further elucidated by the experience and observations of the talented author of this invaluable treatise.

Our limits will not permit us, as we could wish, to enter upon the consideration of the various diseases to which the womb is subject, and which are so ably treated by our author; we have, however, so often proved the truth of the conclusions promulgated by him in his

first edition, that we are naturally inclined to give credence to those brought forward in the second, and until controverted by facts, we shall recommend them to the attentive examination of our readers.

The appendix to this volume "On the Physical Examination of the Uterus and its Appendages," will repay a careful perusal, placing in a clear light before us the advantages of the examination by means of the speculum, and also giving the best mode of its application. The opposition to the use of this instrument is now so nearly exploded, that it is unnecessary to say one word in its defence; but we cannot quite agree with Dr. Bennett as to the necessity for the exposure of the patient in using the bivalve speculum, which he seems to insist upon. From an experience of many years in its use, we have always found that the usual obstetric position, with the aid of the lamp and reflector, is perfectly sufficient to bring all the parts into view; and whilst we have always found our countrywomen gladly avail themselves of every suggestion which may be offered, as a probable means of effecting an alleviation of their sufferings, we feel bound in honour to avoid every unnecessary exposure, and we cannot but think the position on the back opposite a window, is one which should on that account be rejected, except in extreme cases.

With this single point of difference with the opinions of our author, we close our report on this complete and perfect specimen of medical investigation, which combines those rare concomitants in the literature of our profession—an almost new subject, treated in a scientific yet agreeable manner.

Thoughts on Pulmonary Consumption. By W. H. MADDEN, M.D., Physician to the Torbay Infirmary and Dispensary, &c. London: Churchill. 8vo, pp. 219.

There are several deductions connected with tubercular disease, about which the majority of scientific observers seem to be agreed. 1st. That tubercle is an adventitious deposit, differing in structure and appearance from all parts of the healthy body. 2ndly. That a specific diathesis is necessary for its development. 3rdly. That this diathesis consists in an abnormal condition of the blood. 4thly. That this abnormal condition is essentially the same as that to which the term *scrofulous* is commonly applied. The chemical composition of tubercle, and also of the blood of tuberculous patients, has been ascertained by competent analysts, and is adopted upon their authority, by those who are unable to make the investigation for themselves.

The points thus briefly mentioned are very concisely and philosophically elucidated by Dr. Madden, in his "Thoughts on Pulmonary Consumption." So many

treatises upon this prolific subject have been compiled merely for the purpose of attracting *popular* attention, that it affords especial satisfaction when we meet with a little volume like the one now under consideration, which is written for the members of the *medical* profession, and from the perusal of which *they* may derive both pleasure and instruction.

In one chapter of the book the author endeavours to shew that "the observed phenomena depend upon the circulation of a peculiar specific *materies morbi* in the blood, and that the tubercle itself results from the special modification of nutrition, induced by that particular poison, and by that alone." Many "analogies" are adduced in support of the hypothesis. To some, the arguments will be satisfactory; to others, the reverse. The greater number of readers will probably still be inclined to attribute the phenomena of the tubercular diathesis not to a "specific poison," but to what Dr. C. J. B. Williams describes as a "diseased state of the blood, in which there is a tendency, by vessels in different degrees of activity, to deposit tubercle instead of lymph." The condition of the blood in phthisical cases scarcely appears to *require* the presence of a poison to account for its deviation from the healthy standard. The condition is essentially one of a *negative* character. Dr. Madden's own words express this fact:—"We see that the solid constituents, taken as a whole, are below the standard of health; that the fibrin bears a notably increased proportion; and above all, that there is a very marked and constant diminution in the amount of the corpuscles."

A *degraded state of nutrition* may, undoubtedly, be produced by very simple means in constitutions which have previously indicated no symptoms of defective power; and after this degraded state has been established, the deposit of genuine tubercle may supervene. The truth of this assertion is proved, not only by the lamentable effects of unfavourable circumstances upon a multitude of our own species, but also by the influence of circumstances upon many of the lower animals, where no possibility existed of referring the malady to hereditary causes. It may legitimately be asked, *why* the aid of a specific poison should be sought in order to explain results which admit of a rational solution upon less theoretical principles? There are many conditions which we can understand *only* on the supposition of a peculiar *materies morbi*, either inherited or acquired. Dr. Madden alludes to several of this class,—viz., glanders, syphilis, hydrophobia, small-pox, and marsh fevers, and he thinks that because in the strumous diathesis there are many symptoms analogous to some of those which are observed to arise from the presence of acknowledged poisons, it is fair to advocate the idea that the primary *causes* of the phenomena may be similar,—i.e., that tuberculous deposit, as well as variolous suppuration, may really be dependent upon the circulation of a specific virus.

But we must refer our brethren to the work itself for an accurate investigation of the question.

The chapter on "Treatment" is one which should be particularly noticed. Dr. Madden bears most favourable testimony to the employment of cod-liver oil, and the testimony is of unquestionable value, inasmuch as it emanates from a conscientious physician, whose discriminating mind and wide field of inquiry amply qualify him to form a *decided* opinion upon the subject.

The "Undercliff" of the Isle of Wight; its Climate, History, and Natural Productions. By G. A. MARTIN, M.D. London: John Churchill. 8vo, pp. 366.

The subject of this useful little volume is so completely in accordance with one of the main objects of the Provincial Medical and Surgical Association, that it more particularly requires our criticism, and on a careful perusal we rejoice to find that the author has carried out his purpose in such a way as to afford every information to those of our profession who may require it for the guidance of their patients, and at the same time to give such a pleasing and graphic description of this beautiful spot, as to make the book highly attractive to the general reader.

It is, however, chiefly as a guide to the medical man in his choice of a residence for his consumptive patients, that Dr. Martin's work comes under our notice, and we do not hesitate to affirm that the data upon which he grounds his opinions as to the salubrity of the climate, are most carefully selected and arranged. Indeed it is so seldom that we find in these days an author devote ten years of his life to the observation of natural phenomena before giving the results to the public, that we cannot but admire the care which has here been bestowed.

In his chapter on Climate, &c., Dr. Martin has shewn great powers of observation; and in his remarks on relative temperature, evinces a philosophical spirit of inquiry, which is widely different from the panegyrical tone usually adopted by the advocates of particular localities.

To those who may be hesitating in their choice of a winter residence for a patient labouring under tubercular disease, we would recommend an attentive perusal of this book; and the following short extract may serve as a sample of the manner in which the subject is treated throughout.

"Many persons labouring under pulmonary affections are apt to imagine, that in seeking an appropriate climate for the winter, they have nothing more to do than to cast their eyes over a statistical table of the comparative warmth of different places during the colder seasons, and select the most *convenient* which bears the highest rank on the scale. This is a sad fallacy, and one which many have to deplore when too

late. Temperature alone is only one of the advantages to be regarded in this selection of a winter residence. Comparative degrees of *mildness* exist in extensive variety, but I have enumerated more particularly in the preceding chapter, the various qualities it is desirable should be superadded to this property in a climate, and a district may shew a superiority of two or three degrees of temperature, and yet from various other causes be ill-adapted to the exigencies of any particular case."

The chapters on the Natural History of the "Under-cliff" are written in a scientific yet interesting manner, and are well calculated to lead the poor suffering invalid to an examination of those subjects which, by amusing the mind, may tend to prevent its preying on the body, and at the same time by leading to exercise, with an object in view, may invigorate the whole system; whilst the excitement produced by the interest of the pursuit, prevents the ill consequences which might otherwise follow the exposure to the weather, even in so sheltered a situation as that which is here described.

OBSERVATIONS UPON

THE SALE OF ARSENIC & THE PREVENTION OF SECRET POISONING.

By JAMES TUNSTALL, M.D., Bath Hospital.

The subject of secret poisoning having been brought before the Association at our late annual meeting by Dr. Toogood, and a committee formed to prepare a petition to Parliament for the "Prevention of the Indiscriminate Sale of Arsenic," in which the views both of that gentleman and myself were embodied, I have, in common with every member, to thank him, that the first petition upon the subject should have emanated from the Provincial Medical and Surgical Association, thus convincing those who question the utility of our annual congresses, that we meet not only for our own benefit and advantage, but for the advancement of the dearest interests of humanity.

The extreme facility with which arsenic may be purchased, calls loudly for the interference of the Legislature; but our task only commences by the presentation of one petition which, although it embodies the wishes of the Association in its collective capacity, should be but the precursor of a number of others from every part of the United Kingdom.

Dr. Sibson, Mr. Fuge, and myself, thought it more desirable to attack the great arsenic evil first, rather than weaken the cause by entering generally upon the sale of poisonous drugs, for it is better to destroy one prominent enemy, than to weaken our forces by attempting to combat many. An anecdote will illustrate our meaning far better than an argument. "You call morphia poison, do you not, Doctor?" said a friend to us the other day. Undoubtedly we do. "Well, suppose I want a small dose when travelling, am I to send two waiters, (the purchaser and witness,) to get me a night draught?" Such a question, if asked in Parliament, would be fatal to the whole cause; but if we ask for a

remedy for a great and increasing evil, and show how it will practically produce benefit, we are certain of success.

Before we bring the matter before Parliament, let us be prepared to shew that the use of *uncombined* arsenic is not required either in medicine, pharmacy, the arts, or agriculture, excluding that employed by the pharmaceutical or practical chemist and the manufacturer; and let us place prominently forward the fact, that the common form of exhibiting the drug, is by Fowler's solution, in which the colourless fluid is mixed with the red tincture of lavender, in order that no mistake may occur in dispensing. As it is, the medicine is unlike any other liquid used in pharmacy—a most important point where facts are required.

And now, with regard to its sale. It is purchased—

1st. To poison rats and other vermin.

2nd. For sheep dressing.

3rd. By the farmer for steeping corn.

The first of these is the most common excuse with the suicide and murderer; and there is no doubt that the mineral is carelessly sold to any *known* customer or his servant, or to any person who produces a witness, *although both parties be strangers to the vendor*. I have only to refer to the reports of the present summer assize to prove my position; while every person knows that other drugs more safe, (if I may use this term in reference to poisons,) may be procured, equally effectual for the destruction of vermin; I therefore assume that arsenic is not required for poisoning rats.

2nd. I am informed by a chemist, on whom I can rely, that in Wiltshire the veterinarians and chemists employ a combination of soft soap, potash, and arsenious acid, for sheep dressing, and apply the dressing themselves; therefore I maintain that, *uncombined*, arsenic need not be sold for sheep dressing.

3rd. For steeping corn I believe, although I want more information on the subject than I have yet obtained, that the sulphate of copper is superseding its use, and is found to answer better. If so, I have no difficulty in arriving at the conclusion, that for this purpose also its sale is unnecessary.

For the two latter purposes arsenic, in the form of a white powder, is extensively sold; and unfortunately, both by *accident* and design, it has been mixed with various articles of food; it has thus produced fatal effects, which would not have been the case had it been combined with "some material, the administration of which, with food, would be at once detected, either by the appearance or taste."

And now, with regard to the manufacturer, I am inclined to carry Dr. Toogood's suggestions in regard to a licence, still further than my worthy friend; not only should the vendor be licensed, but the manufacturer also, thus the licence to sell, and the licence to use, would only be required by those who were compelled to apply for it, in consequence of the large quantity required in their business; by this means its indiscriminate use would be checked; the sale of a "pennurth of arsenic for rat poison" would be prevented, and its use confined within its proper limits by the authority of Parliament.

I now come to the medicinal application of the drug,—to quote Mr. Hunt, “not always cautiously administered,” and venture to suggest that my own plan of administration, where drops are concerned, should be invariably followed,—namely, that the dose should, by the addition of a vehicle, be always a *known*, and not an *uncertain*, quantity. I invariably make a teaspoonful a dose, and where Fowler’s solution is given to a patient I add a small quantity of tincture of aloes, effectually to prevent mistakes. I do not wish to intrude longer upon the columns of the Journal, but having for some time devoted much time and attention to the subject of arsenic, my colleagues, on the “Secret Poisoning Committee,” with the sanction of the President, confided this momentous inquiry to my care. I earnestly crave the assistance of every member of the Association towards its full elucidation, with a view to a practical result, ever anxious to interest ourselves where the public health and welfare is concerned. I trust that our united endeavours may be crowned with success, so that such a mass of facts may be presented to the legislature, that a firm foundation may be laid for an Act of Parliament, having for its philanthropic object the prevention of the indiscriminate sale of arsenic, and the crime of secret murder. To effect this object I will strenuously devote my leisure time, so that I trust soon to lay before the Central Council such a weight of evidence, that the nation at large will, by their own spontaneous feelings, petition for an Act of Parliament upon the subject, and thus enable our Association to claim the honour of having directed the public attention to the greatest blot upon the civilization of the nineteenth century.

Proceedings of Societies.

BIRMINGHAM PATHOLOGICAL SOCIETY.

April 5th, 1849.

Dr. FLETCHER IN THE CHAIR.

Cirrhosis of the left lung; the right enlarged, generally emphysematous, and studded with firm dark nodules, and with miliary tubercles interspersed throughout its structure.

Dr. Fletcher exhibited the preparations, and gave the history of the following case:—

George Drummond, stone-mason, aged 45, admitted March 2nd, 1849, into the Birmingham General Hospital. A tall emaciated man almost bent double; pneumonia of right lung, contraction of left; has had cough and dyspnoea for eighteen months, but was enabled to follow his employment until very recently. In October last he had pain on the left side, and his other symptoms became aggravated. Has never spit blood. He came for some weeks as an out-patient, but was advised to get an in-patient’s note. His face is pale and livid, and he is suffering from extreme dyspnoea, cough very troublesome, expectoration muco-purulent, pretty copious; complains of pains and general sense of oppression about the chest; pulse very weak; decubitus dorsal. The left side is remarkably contracted, the axillary region forming a mere edge, the supra and infra-clavicular

regions excavated; but the side is by no means smooth, the intercostal spaces being developed. This side moves considerably less than the other; the hand placed on the anterior or left side detects very much increased vocal vibration. All over this side, before and behind, but particularly in the front, there is loose mucous rattle almost amounting to gurgling. The breathing and voice are over the same space intensely cavernous. These latter phenomena are more marked in the infra-clavicular and middle axillary regions than elsewhere, the whole left side is dull, but the dullness extends little beyond the left border of the sternum. On the right side, before and behind there is fine crepitation and for the most part peurile respiration. R. Ant. Tart., gr. iij.; Mist. Camph., oz. viij.; Cap. oz. j., tertius horis. Emp. Lyttæ lateri dextro.

3rd.—Breathing much relieved, expresses himself as better; crepitation on right side much diminished. Takes food. Perstet. Urine acid, no albumen, specific gravity 1026.

Vespere.—Intense dyspnoea; pulse 120, very weak; face livid, is constantly groaning in expiration both asleep and awake. Three glasses of wine. R. Am. Carb., scr. ij.; Spt. Æth. Sulph., oz. ss.; Vin. Ipecac., dr. ij., Decoct. Polygalæ, oz. viijss.; oz. j., quartis horis.

4th.—Much revived this morning but dyspnoea very great; expectoration scanty, thick, and purulent; physical signs as before. Omitte Vinum. Rep. Mist.

Vespere.—Again appears sinking, countenance much distressed; dyspnoea urgent; pulse rapid, a mere thread, extremely compressible. To take two glasses of wine. A few minutes after the report the patient died.

Autopsy next day.—The body emaciated, left side remarkably contracted, left shoulder depressed. *Thorax:* The right lung extended fully to the left border of the sternum and considerably overlapped the heart, it was attached to the costal pleura by a few adhesions at the apex; lower down, the surface was coated by a thin layer of recent lymph. It was generally engorged. To the touch the lung gave the idea of being filled with firm nodular masses, but was universally crepitant. On section it was observed to be of a dark slate colour throughout, and to be dotted with thin grey masses about the size of peppercorns, here and there they were interrupted with small miliary tubercles. The whole lung had a general fibrous aspect. The left lung was most firmly adherent to the side throughout, so that it was impossible to take it out of its cavity without injury to the pulmonary substance. The false membranes were extremely thick and tough. The lung was extremely contracted, being not more than half its natural dimensions. The bronchial tubes were universally dilated, so that the lung, when out, gave the appearance of being everywhere traversed by fibrous canals, between which was the nodular and slate-coloured pulmonary substance. The bronchial tubes were laid open in many parts of the lung and traced to the surface; when examined they exhibited the appearance described. The heart was flabby and enlarged to a slight degree, but nothing worthy of note was observed in either of its cavities or orifices. The other organs of the body were examined, but presented nothing abnormal.

This being the first case of this peculiar affection which has been brought before this Society, it must be fairly supposed that it is not very common in this neighbourhood, in proof of which I can say that I have

been on the look out for it ever since the remarks of Dr. Corrigan upon the subject, and although I have seen many cases of dilated bronchi, I have never met with this affection before. It was first described by Dr. Corrigan in the *Dublin Journal of Medical Science*, for May, 1838, to which very little has been since added by himself or others, although in confirmation of his views I may state that the title is acknowledged by all writers on diseases of the chest of the present day, and in all the Pathological Societies we see accounts of the disease having been from time to time exhibited. The name of this disease is used on account of its similarity to the pathological state of cirrhosis of the liver which it must be remembered was first spoken of by Laennec, who supposed that it consisted of a morbid deposit in the tissue of the liver; but it has since been determined by accurate pathologists that cirrhosis of the liver consists in a contraction of its volume, in consequence of hypertrophy of its cellular tissue, which has been formed into a dense fibro-cellular web, contracting and obliterating the natural lobules and vascular structures of the organ, by which secretion of bile is prevented, and an impediment to the circulation formed, which gives rise to the obstinate ascites by which it is accompanied. Now it is exactly the same change which takes place here, for hypertrophy and contraction of this cellular structure of the lung forms the disease in this organ. We all know that the lungs are composed of bronchi, and their terminations in air-cells, pulmonary arteries, and veins, with their numerous branches, and the inextricable and delicate network of their capillary system, and the nutritive arteries of the lungs, intimately connected by cellular tissue; and underneath the pleura, lying between it and the true pulmonary tissue, is an extension of this cellular tissue, which has been described as a fibro-cellular membrane, by Dr. Stokes, but is certainly nothing more than an extension of the cellular tissue of the lung. By a little dexterous manipulation it can be easily seen that under the pleura there exists a layer of cellular tissue, which can be raised from the pulmonary tissue in the healthy lung; but in the lung that has been the subject of inflammation, this membrane is much more dense, and more readily demonstrated. This cellular tissue exists also in a very condensed form close around the bronchial tubes, along which it is seen to be disposed in longitudinal fibres. As the result of a general and intense inflammation, a deposit of lymph takes place in the cellular tissue of the lung, by which it is rendered thicker and contractile in its nature; it then contracts and compresses the other tissues of the lungs; and the longitudinal fibres of the cellular tissue of the bronchi tend to shorten them, and to draw all parts of the lung up towards its root; and if the lung were situated as the liver, which is surrounded by soft and yielding organs, most probably this would be all the visible effects of this disease; but as the lung is situated in a cavity, with bony parietes, from the walls of which it cannot recede without causing a vacuum, it necessarily follows that the cavities of the lung, in connection with the external air, must dilate, in order to allow the contraction of the cellular tissue, which takes place as described in this disease, and thus is caused the dilatation of the bronchi in this pathological state of the lung.

(To be continued.)

Foreign Department.

PROGRESS OF THE CHOLERA.

Since our last notice of cholera, as it has appeared in Paris, the disease has undergone a steady decrease, both in the number and intensity of the cases, and consequently the proportion of recoveries has of late been proportionably augmented. Those who are fond of vaunting their individual success may see in this latter fact a proof of their own therapeutic sagacity; but the candid observer in this country will agree with the avowal of our continental contemporaries, that the happy improvement in the aspect of the tables of mortality is in reality due to a spontaneous exhaustion of the malignancy of the epidemic, and has been but little influenced by any of the heterogeneous modes of treatment employed. The total number of cases in France up to the present time, as far as can be ascertained, is 27,054, though in all probability this is considerably below the real number. The deaths amount to 18,961.

DIFFERENCE BETWEEN VENOUS AND ARTERIAL BLOOD.

According to Bécлар venous blood differs from arterial, in containing less globules and more fibrin. The blood in the arteries everywhere presents the same sensible characters; not so the blood in the veins. The blood in the splenic vein constantly contains less globules than any other venous blood in the system, and the spleen seems to be the organ of destruction of the blood-globules. The blood in the vena porta, before its junction with the splenic vein, varies much in its composition. At the commencement of digestion the globules are considerably diminished, and the albumen increased; but when digestion is completed, the globules are augmented, and the albumen normal in quantity; the globules, therefore, seemed formed in the vena porta. Thus, in the same system the globules are formed and destroyed; the mesenteric branch of the vena porta continually supplies new globules to the liver; and the splenic branch as continually casts into the same vein traces of those which have ceased to exist. The physical properties of the fibrin of the blood in the vena porta and splenic vein differ also from the fibrin in the general venous circulation.—*Gazette Médicale*, Jan. 22, 1849.

CÆSAREAN OPERATION, SUCCESSFUL BOTH TO MOTHER AND CHILD.

An Italian Journal, the "*Gazetta Medica Lombarda*," reports the following case:—

A female, aged 35, had for many years been subject to rheumatic pains in the pelvis and lower extremities. Her first child was extracted dead. During her last pregnancy she had a return of her arthralgia, during the persistence of which her body became so curved, that she could not raise herself upright. Labour commenced on the morning of the 20th of June, and the

midwife having recognized an arm presentation, as well as a distorted pelvis, sought the aid of M. Custodi. By him it was soon ascertained that the transverse diameter of the brim was only two inches; the oblique, three inches. Under these circumstances, in accordance with the views of the Italian school, the Cæsarean operation was at once decided upon and performed, six hours after the commencement of labour.

The only bad symptom which followed was some degree of meteorism, which was combated successfully by the external and internal use of ice, and on the ninth day the abdominal incision had perfectly closed.

NEURALGIA OF THE PENIS.

By Dr. Spengler.

This case occurred in a man aged 40, who had been recently cured of gonorrhœa, and is reported in *Casper's Wochenschrift*, No. 46., 1848. During connection with his wife for the first time after a cessation of ten weeks, he became the subject of intense pain in the glans penis, which was repeated on each repetition of intercourse. It also followed erection without emission. In the intervals he was quite free from pain. Various methods of treatment were adopted without benefit, until Dr. Spengler cauterized the urethra, the repetition of which, four times, completely cured him.

NEURALGIA OF THE CERVIX UTERI.

According to Malgaigne this is a frequent affection. It is combined with leucorrhœa, and with congestion of the os and cervix. The characteristic symptoms is the presence of a painful spot, generally near the anterior lip. It is also accompanied by neuralgic pains in the abdomen, loins, and epigastrium. His treatment consists of an incision into the painful spot, by which he divides the affected nerve. He states that he has met with great success, and the hæmorrhage has in all cases been trifling.

General Retrospect.

ANATOMY AND PHYSIOLOGY.

ON THE NATURE OF LIMBS.

Mr. Owen has given a lecture, with the object of showing the unity of type which pervades animal structures. He here illustrates this unity, by reference to the general and serial homologies of the locomotive extremities, in the vertebrated classes of animals. However dissimilar in outward form and use these extremities may be, yet the anatomist can trace through the whole series a unity of type. The strong, stiff, short, flat paddle of the dugong can find its homologue in the thin expanded sheet of membrane which forms the wing of the bat, and this again in the trowel of the mole. The doctrine of final causes would not lead us to anticipate such uniformity. By this doctrine we cannot account for the multiplicity of parts which anatomy reveals in the stiff paddle of the whale, which plays as one piece on the trunk to which it is attached.

"There is," says Mr. Owen, "a deep and pregnant principle concerned in the issue of these dissections." Mr. Owen proceeds to point out the homologous parts of limbs in various classes of vertebrata. When the bone of the horse's arm is compared with that of man, the same type is found to govern the formation of both; there is a diminution of accessory parts in the former, but the essentials are the same. There is a simplification of structure, but not in ratio with the loss of function; the carpal series of bones, again, answer exactly in each. The hand of the horse, though apparently reduced to a single digit, shows the rudiments of two others, viz., the splint bones, and even the very bones in the human hand, to which these correspond, may be pointed out. "To skim the air, and to burrow in the earth, would seem to require instruments as different in combination as in size and shape; but observe how closely the skeleton of the mole's trowel conforms, in the number and relation of its parts, to that of the bat's wings. The chief change is this: whatever is elongated and attenuated in the bat, is shortened and thickened in the mole. Then again, in the undivided sheath of the fin of the whale, who would expect to find the full number of joints and segments? Yet these bones offer perhaps the most striking instance of an adherence to type, notwithstanding the absence of all those movements, &c., which explain the presence of these several segments in the horse and man, on the principle of final causes. On extending our researches further, we find within what narrow limits of the vertebrate series the type of the anterior member, as seen in man, ceases to be recognisable, and then not by a change, but by a gradual fading away of the pattern; as the limb rapidly disappears at the extreme of the series, we first find one segment abrogated, then the digital rays fall short, then the scapular arch alone remains, and lastly, as in serpents, all trace of arch and appendage has vanished. It is from the study of these transitions, that we gain the deepest and truest insight into their essential nature. But there is a still further uniformity of type, manifested not only in the bilateral symmetry of the body, but also in a similarity between the anterior and posterior extremities; their general resemblance is evident enough. When examined in detail, the ilium is found to repeat the scapula, the broad perforated plates below correspond generally with the clavicles, the femur answers to the humerus, and so on. Again, we find in certain mammals, the pelvic arch subject to the same variety by defect, as the scapular arch; thus, in the bat, the pelvic arch remains open, while the scapular is closed, and so presents a reversed condition to these arches in the horse, and the cause is obvious: in the bat the fore limbs are the locomotive agents, the hind limbs merely supporting members; in the mole the fore and hind limbs differ in proportion, but not in their composition. The skeleton of the plesiosaurus shows this unity of type between the fore and hind limbs closely preserved, and it is the more striking, as here the conformity is not broken by the opposite flexures, as in the fore and hind limbs of terrestrial mammals."

Vicq-d'Azyr first called attention to these serial correspondences. Mr. Owen points out some errors he fell

into in his interpretation of them, and then adduces instances to illustrate the true character of the carpal and tarsal bones, which human anatomy alone could never have revealed. By this analysis we can even point out the very finger in the hand of man which answers to the fore foot of the horse, and the toe that corresponds to its hind foot. "Were anything," says Mr. Owen, "wanting to impress the mind with the conviction of the unity of type which pervades animal structures, it might be such a fact as this:—a perfect parallelism reigns in the order in which the toes successively disappear in the hind foot;" and this is beautifully illustrated in detail by Mr. Owen. "It is interesting to perceive, both in the human hand and foot, that the digits which have been most modified, either by excess or defect of development, are precisely those that are the least constant in the mammalian series, viz., the two which form the extremes of the series; whilst the three intermediate digits are more conformally developed. In the hand, the digitus medius, the most constant of all, still shows superiority in size, though few would thereby be led to suspect that the bones forming the three joints of this finger, answer to the great pastern bone, the little pastern-bone, and the coffin bone of the horse, and that its nail represents its hoof."

Mr. Owen next inquires: What is the archetype, the essential nature of limbs? and his investigations lead him to conclude that arms and legs are developments of costal appendages, not liberated ribs, as Oken supposed. A rigorous investigation of their modified forms, as they exist among the different vertebrata, necessarily leads to such a conclusion. A vertebra is a natural group of bones, a primary segment of the endo-skeleton, and its parts are recognisable under all their teleological modifications. Mr. Owen enters into a minute comparative survey of these parts, and he observes, that he only who has been exclusively occupied in human anatomy, will have any difficulty in admitting the conclusions at which he has arrived, viz., that limbs are developments of costal appendages, that the scapular arch has been detached from its centrum, and that this centrum is to be found in the occipital vertebra.

ON THE DEVELOPMENT OF THE PURKINJEAN CORPUSCLE IN BONE.

Schwann, in his "*Mikroskopische Untersuchungen*," considers that the Purkinjean corpuscle of bone is derived from the pre-existing cartilage-cell, and that the canaliculi are prolongations, or protrusions of the cell-wall. Many later authors, among whom are Gerber, and Todd and Bowman, express the opinion that it originates in the nucleus of the temporary cartilage-cell, and Tomes entertains the idea, that after the formation of the osseous tubes, in the process of ossification, the latter are filled up by a deposit of osseous granules, and while this deposit is going on, small cells are left, which are the rudimentary Purkinjean corpuscles. Henle thinks them to be the cavities of cells, the thickened walls of which are pierced by the canaliculi. Hassall confirms the view of Schwann by stating, "the bone cells (Purkinjean cor-

puscles) are to be regarded as complete corpuscles, the canaliculi of which are formed by the extension of the cell-wall, which is proved by watching the formation and development of bone."

The opinion of Schwann and Hassall Dr. Leidy fully corroborates from his own observations upon an ossifying frontal bone, from a human embryo measuring two inches from heel to vertex. Each lateral half of the bone is about three lines and a half in diameter, and presents to the naked eye the appearance of a delicate and close net work, arising from the numerous areolæ occupied by temporary cartilage. The frontal and orbital plates, it is worthy of incidental remark, at this period, are nearly on a plane with each other, or are connected together at a very obtuse angle along a central, transverse, crescentic, raised line, the rudimentary supra-orbital ridge.

The mode of development of the Purkinjean corpuscle, as noticed upon the upper or posterior border of the os frontis, is briefly as follows:—After the primitive ossific rete has been formed from the deposit of the osseous salts, enclosing groups of cartilage cells in the areola, the further deposit takes place in a fibrous or line-like course from the parietes of the areola of the primitive osseous rete, in the interspaces of the cartilage-cells nearest to or in contact with the sides of the areola. At this period the cells shoot out or extend their canaliculi between the fibrillæ just formed, and then the cell-wall and continuous walls of the canaliculi fuse with the translucent, homogeneous, or hyaline substance of the cartilage existing between the cells and the osseous fibrillæ, and with the fibrillæ themselves, by the deposit of the osseous salts. The period of the formation of the canaliculi appears to be quite definite, occurring during the deposit of the osseous salts, and not before. To such an extent is this the case, that I noticed in several instances, cells which had formed their canaliculi upon the side which was ossified, while upon the other side I could not distinguish any trace of them.

During the whole time of the formation of the Purkinjean corpuscle, the nucleus remains unchanged; at least no change is perceptible in it beneath the microscope, and by applying tincture of iodine to the preparation, which turns the nucleus brown, I was able to detect it within the perfected Purkinjean corpuscle, not only corresponding to the nucleus of the remaining unossified cartilage-cells in granular structure, but also in its measurements. After the Purkinjean corpuscle has been formed a short time, the nucleus dissolves away or disappears.

The newly formed Purkinjean corpuscle is about the same size as the remaining unossified cartilage-cells.—*American Journal of the Medical Sciences, and Half-Yearly Abstract*, Vol. IX.

STATE OF THE FIBRIN IN BLOOD.

M. Horn affirms that the fibrin in the blood is united to the corpuscles, and not free; his proofs are, that when frog's blood is filtered, the fibrin appears in the form of flocculi, or thready coagula, and the microscope shows that these are formed out of the granules which

are met with in the blood, and have the characters of fibrin; moreover, when the fibrin is carefully removed by beating, these corpuscles can no longer be found. The fibrinous corpuscles are formed from the colourless molecules, found so abundantly in the lacteals and lymphatics. M. Horn believes that these molecules by aggregation produce true lymph-corpuscles, which, indeed, in their earliest stage, appear like conglomerations of extremely little molecules. The molecules dissolve away as the corpuscles progress, the corpuscles become flattened and smooth, and are, lastly, converted into blood-corpuscles. M. Horn considers, also, that pus-corpuscles are nothing but aggregations of these molecules; just as in the normal state the fibrin is converted into globulin, so in pathological conditions it is changed into pyin.—*Schmidt's Jahrbuch*. Band viii. 1848.

MIDWIFERY.

CATHETERISM OF THE FALLOPIAN TUBE.

Dr. Tyler Smith exhibited an instrument he has invented for deobstructing the Fallopian tubes in cases of sterility, arising from their obstruction or occlusion at the uterine extremities by thickened mucus or other impediments. The instrument, in the use of which the speculum is always required, consists of a small silver catheter, bent like the male catheter, or the uterine sound, to adapt it to the curve formed by the uterus and vagina, and having a lateral curve at the distal extremity, pointing, when *in situ*, to the uterine mouth of the Fallopian canal. Through this catheter a fine, flexible, whalebone bougie is passed into the Fallopian tube; when the small bougie is thus passed so as to project at its Fallopian extremity, the instrument represents accurately the singular direction taken by the generative canal, from the mouth of the vagina to the fimbriated extremity of the tube. This novel operation proposes to bring an important organ under treatment, which has hitherto been removed from all interference.—*Medical Gazette*.

CONVENTION OF POOR-LAW MEDICAL OFFICERS, THE POOR-LAW BOARD, AND THE GENERAL BOARD OF HEALTH.

To the Editor of the Provincial Medical and Surgical Journal.

SIR,—The great interest now taken in the subject of Poor-Law Medical Reform, leads the Committee to beg the favour of your publishing the following correspondence:—

(COPY.)

To the President of the Poor-Law Board.

"4 and 5 William IV., cap. lxxvi., clause 46. And the said Commissioners may and are hereby empowered, &c.; and when the said Commissioners may see occasion, to regulate the amount of salaries payable to such officers, respecting, &c.

10 and 11 Victoria, cap. cix., clause 10. And be it enacted, &c., That all the powers and duties of the Poor-Law Commissioners, with respect to the adminis-

tration of relief, &c., and all other powers and duties now vested in them, shall be transferred to, and vested in, the Commissioners, and shall be henceforward exercised by them, under the provisions of this Act, &c."

SIR,—The Poor-Law Board having the power, as evidenced above, "to regulate, when they may see occasion, the amount of salaries payable to officers respectively;" the Committee of the Convention of Poor-Law Surgeons take leave to memorialize you, who have already considered the position of Poor-Law Medical Officers, that you may issue such orders as may secure a payment to them in accordance with the extent of their duties, and the costs incident to the supply of medicines and the maintenance of establishments needful for an efficient administration of medical relief to the sick-poor.

Although your Memorialists have expressed the opinion that a Board specially constituted for the supervision, control, and payment of poor-law medical relief, (now extended to near three millions of her Majesty's subjects in England and Wales,) with the whole cost thereof, derived from the consolidated fund, would be the best means to secure justice to the union surgeons, and the fullest advantage to the sick-poor, they are willing to waive, for the present, this view of the subject, under a sense of the difficulties which beset its immediate introduction.

They beg, however, in the most earnest manner, respectfully to submit to you, that an exercise of the authority and power of the Poor-Law Board, as shown to exist in the citations from the Acts of Parliament, would be equal to such a diminution of their admitted grievances as might render their tenure of office, and the rigorous performance of their obligations, less painful and humiliating to themselves, and, in many ways, more beneficial to the suffering poor.

They therefore respectfully suggest—1st. That henceforth the Poor-Law Board should, by a special order, direct that all appointments of medical officers be as durable as their good conduct and capability and willingness to continue therein.

2ndly. That the amount of payment be based on a calculation of the number of cases attended in a given district, during the past three years. That the fixed salaries be arrived at by determining 6s. 6d. as the average sum to be paid per case throughout the country.

That the provisions of the medical order in 1842, for extras be enforced in all unions; and under all circumstances be made binding, except that the operations performed in the house be awarded the same fees allowed to out-door cases. Also, that a special provision be forthwith made to secure a just compensation for the enormous extra labours which are entailed upon the union surgeons, through the Board of Health, under its general powers and regulations, more particularly during the presence of cholera, or other epidemics.

We beg to call your attention to the subjoined copy of a letter recently received from the general Board of Health on the subject. We have the honour to be,

Sir, yours very respectfully,

THOMAS HODGKIN, Chairman.
CHARLES F. J. LORD, Hon. Sec.

July 23rd, 1849.

(COPY.)

Poor-Law Board, Somerset House,
August 1st, 1849.

Gentlemen,—I am directed by the Poor-Law Board to acknowledge the receipt of the communication signed by you on behalf of the "Committee of the Convention of Poor Medical Officers," and to inform you that the suggestions contained in the communication shall receive the best consideration of the Board.

The Committee are, however, so well acquainted with the subject of Poor-Law medical relief, that it is unnecessary for this board to point to it the difficulties which exist to any immediate and general alteration or modification of the present system.

As regards the suggestion of the Committee, "That a special provision be forthwith made to secure a just compensation for the enormous extra labours which are entailed upon the union surgeons through the Board of Health under its general powers and regulations, more particularly during the presence of cholera and other epidemics," I am directed to state that the Poor-Law Board are not empowered to lay down any prospective scale of remuneration for such services, but that of granting a reasonable compensation on account of extraordinary services is vested in the guardians with the approval of this Board, by the proviso to article 172 of the general consolidated order, and that such power has already been acted upon in several instances.

I am gentlemen, your obedient servant,

W. G. LUMLEY, Assist. Sec.

To Thomas Hodgkin, Esq.

Charles F. Lord, Esq.

It should be observed, that no "prospective scale of remuneration" was sought from the Poor-Law Board by the Committee. The memorial and application for relief arose less from the additional labours which an alarming epidemic like the cholera must induce, than from the vexatious returns and reports of cases for the public advantage, and the liability of the union surgeons, under orders from the General Board of Health, to examine nuisances, and report as officers of health.

The provisions of article 172 of the general consolidated order, certainly might be sufficient to provide adequate remuneration to medical officers; but experience has proved, over and over again, that merely permissive clauses will not reach the existing evil, admitted by all concerned to be very great.

The answer from the General Board of Health in reply to the Committee appeared in the *Lancet* of July the 21st; it throws the onus of providing for the medical officer upon the Poor-Law Board; this Board politely hand the case over to the Boards of Guardians. Mr. Mitchell's experience may be considered an average sample of the mode in which these functionaries will deal with applications for advanced payment to medical officers. "Mr. Mitchell had been the medical officer to the parish of Lambeth for eighteen years. Three half-pence per cholera case whether occurring night or day! He made equitable propositions to the Board, but the Lambeth guardians paid no attention; in consequence he sent in his resignation, which was accepted!"

Seeing the union surgeons thus banded about from one board to another, and as a body redressed by none,

the simple adage of "a fall between two stools" occurs to the mind; and even a saying of the quaint William Cobbett, about John Bull being persecuted by two sets of thieves,—the Whigs on one side and the Tories on the other.

It is gratifying, however, to turn for a moment from this dark shadowing, to the light which breaks in from the union to which Mr. Vallance, the intrepid advocate of a better system of poor-law medical relief, is the well-trying medical officer. He reports, to the credit of the Board of Guardians of the West Ham Union, that a sense of justice has impelled them to pay £1 per case of cholera to whomsoever the professional attendant may be; as also fifteen per cent. (for six months) upon the annual amount of the salaries paid to their medical officers, as some remuneration for their services as officers of health. If other boards would obey the injunction of Ancient Writ, "Go, and do thou likewise," there would be less cause to trouble you with these details.

I have the honour to be, Mr. Editor,

Your very obedient servant,

CHARLES F. J. LORD, Hon. Sec.

Hanover Square, August, 1849.

EMPIRICISM AT CHELTENHAM.

[We are requested by Dr. Boisragon to publish the following correspondence relative to the use of his name, by a chemist, at Cheltenham.—ED. J.]

Sir,—It has come to my knowledge that you have been in the habit, for some time past, of affixing Dr. B's name to various placards posted round the town and neighbourhood of Cheltenham, as well as on wrapping-bills lying on your counter, purporting to announce or recommend the sale of a prescription of his, whether as directed by him in his public duties as physician to the dispensary or prescribed in private practice, and thus being, without his sanction, improperly published. Now, as the giving his name would be derogatory to the character of a physician and gentleman, and as not only his, but my name, where I practice, may be degraded by such a transaction, I have to request that you will immediately withdraw Dr. Boisragon's name from the above-mentioned advertisements, and state in the papers, that you have heard from me that you have been mistaken, and that no sanction has been given to the same, or we shall be obliged to take such notice of it as you may find very inconvenient to your progress in making a respectable connection. Dr. Boisragon has the honour of being Vice-President of the Provincial Medical and Surgical Association, and he will be under the necessity, if I inform him of your persisting in your present practices, of calling in their powerful aid to repress such improper conduct towards one who has ever kept himself free from empiricism of any kind.

I am, Sir, your obedient servant,

J. B.

Mr. Beetham.

P.S. An answer at your early convenience will oblige.

Cheltenham, July 24th, 1848.

Sir,—I am in receipt of yours of the 20th inst., and beg to state that you have been misinformed respecting

my having placarded the town and neighbourhood of Cheltenham with placards bearing the name of Dr. Boisragon. I deny ever having done so. I certainly have circulars on my counter, a copy of which I have enclosed, so that you may see that I only state that they are prepared from a prescription of Dr. Boisragon's. I think you will not find anything that will lead any person to conclude that Dr. B. has anything to do with them, therefore I cannot see how they have a tendency to degrade either you or Dr. Boisragon. I can only say that hundreds of individuals have tried the pills and spoken in the highest terms of them and the doctor, and had I have known his address, it would have been to his advantage, as numbers of both ladies and gentlemen have inquired after him and would have consulted him.

You will perceive that I do not state that they are introduced under his sanction, therefore I do not see any necessity of inserting anything in the papers about the matter. I am only sorry that it should have caused you so much uneasiness.

In haste,
I remain, Sir, your obedient servant,
W. BEETHAM.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND
SURGICAL JOURNAL.

SIR,

Be pleased to allow me to correct an error in the report of the proceedings at our meeting at Worcester, in the last number of the Journal, in reference to the place of meeting next year. What I said was to the following effect:—

That I was the bearer of an invitation from a hundred and twenty members of the South-Eastern Branch, including the town of Brighton, to the gentlemen assembled at Worcester, to meet next year at Brighton. But learning that a previous invitation from Hull had been received by the Council, strengthened by private letters, earnestly soliciting the honour for 1850, a proper complaisance and a due deference to this prior invitation, induced me on behalf of my friends in the South-Eastern District, to waive our pretensions for the present. And although the Worcester meeting could not pledge itself for 1851, the gentlemen present clearly understood that our invitation should apply to that year, with our hope that we should have the pleasure to receive them at Brighton, at the Annual meeting in 1851. With this understanding, I did not hesitate to move that the next meeting of the parent or entire Association be at Hull.

I remain, Sir, your very faithful servant.
THOMAS MARTIN.

Reigate, August 9th, 1849.

Resolution unanimously adopted at the South-Eastern Branch Meeting, 27th June, 1849.

"That on many considerations, the annual general meeting of the entire Provincial Medical and Surgical Association at Brighton the next year, would be, in the estimation of all present, a very agreeable and desirable event; and that an invitation from this meeting, to that effect, be presented to the Council of the Association at the ensuing meeting at Worcester."

NOTICE OF DR. THACKERAY.

The following tribute to the memory of our late lamented Associate Dr. Thackeray, appeared in a local paper. It is so evidently the production of one well acquainted with his character, that we have great pleasure in transferring it to our columns.

It is with unfeigned regret we have to announce to the public the death of Dr. Thackeray, who, after a long and most painful illness, died at his house in Nicholas Street, Chester, on Sunday morning, July 29. He was born at Cambridge on the 15th of April, 1770.

An eminent physician naturally holds a high place in the society of a provincial town; and if that influence is increased by the personal qualities of the individual, and extended by a protracted life, it is hardly possible to conceive any one, round whom the combined feelings of gratitude, regard, and veneration, will collect a larger amount of interest. Such has been the case in Chester in days still remembered by its inhabitants,—and such in no ordinary degree was the case with the lamented subject of the present notice. Beyond the respect due to his professional skill, and the influence which was gained by the liberality in which it was exercised, Dr. Thackeray has established claims on the good will of his fellow-citizens by a long series of services rendered to the public, and by a spirit which rendered him alive to every call where the good of the community might be promoted. To his fostering care, and to the prudence with which he managed its concerns, that excellent institution the Blue-Coat School owes its present prosperity, if not its present existence. Unwearied in his exertions, he was always at his post when the Monthly Board required his attendance; and he exhibited as much attendance to the details of internal management as he did to its general maintenance. In all the other charitable institutions of the city, he took the same lively interest; and at a period when most men would have pleaded, and many would have felt, that increasing infirmities and aggravated pain justified absence, he seemed resolved to labour while life lasted, and to devote the little strength that was left to the cause which he had originally promoted in his more vigorous days.

For all these varied offices he possessed peculiar qualifications. A warm heart, and a strong mind, found in him a frame capable of great labour; a voice that could always make itself heard, and a constitution which proved its strength by the protracted struggle it sustained with agonizing pain; and if his warm feelings ever carried him beyond that limit which the strict letter of courtesy requires, those feelings were sure to redress the apparent wrong, and to soothe the spirit which had been borne down by the vigour of his address, by the frankness of his apology.

In those hours of retirement from professional duties which he had the wisdom to claim, Dr. Thackeray entered largely into the pursuit of agriculture. As a scientific planter he ranks high amongst those who have contributed to that branch of national wealth. He lived to see a wide extent of the hilly country near Mold covered with trees raised from acorns of his own sowing; and had reason to pride himself on the success of a

system, which had turned a waste into a forest, during the life of him who undertook the work.

We have hitherto merely glanced at what the world saw, and what the world knew of Dr. Thackeray, as a public character; and perhaps it is due to the delicacy of domestic life, that a public testimonial should be limited to public qualities, and leave the rest to be conjectured from what has been already said. The many, however, who knew what he was in private life,—who knew the tenderness of his feelings, the warmth of his affections, his exemplary discharge of every private duty, would feel that the most important features in the portrait were omitted, if these were not noticed. Let it be enough to say, that the man who in public was always loud in denouncing what he thought was wrong, strenuous in contending for what he deemed to be right, and who seemed made for the rough tumult of political or civil strife, was at home indulgent, forbearing, and forgiving; the tenderest of parents, the most affectionate of brothers, a hearty friend, an indulgent master, concealing his own sufferings lest pain should be caused to those who loved him, and as patient and submissive, under infirmity and agony, as he had been active and energetic in the business of life.

Such union of qualities, naturally so diverse, and in themselves so opposite, can, we believe, flow but from one principle, and that the best and highest. The calmness with which he contemplated death did not arise from any desire to escape from sufferings which were hardly to be borne, for he despised the pain which was wearing out his strength, and conversed with cheerfulness as soon as the paroxysm was over; but it was, we may believe, the fruit of reliance on Him, whom he had known to be sent into the world to seek and to save that which was lost.

At the monthly meeting of the Governors of the Blue Coat School on Monday, the 6th instant, the following resolution was entered upon the books of the Institution:—"That this Board takes the first opportunity of expressing a deep sympathy on the death of Dr. Thackeray, one of the oldest, most liberal, and most devoted friends of this Institution."

Such is the impression produced upon his immediate neighbours and friends; but to this Association he is more immediately illustrious, as the liberal donor of the Thackeray Prize of fifty pounds, in 1837, which was thrown open to the competition of the members of every accredited school for medicine and surgery in the United Kingdom.

Medical Intelligence.

SANATORIUM IN THE ISLAND OF MADEIRA.

In our advertising columns will be found a prospectus in anticipation of the establishment of a Sanatorium in the island of Madeira, for the reception of persons labouring under pulmonary diseases.

A Committee, presided over by Her Britannic Majesty's Consul, and composed of the principal residents in Madeira, was formed in Funchal, in April

of the present year, to carry out this intention, and an eligible furnished house is about to be taken for the reception of patients.

At a public meeting, held at the Hanover Square Rooms, on Monday, June 25th, it was resolved, "that as consumptive maladies are more prevalent than any others in these islands, and at the same time are those for the treatment of which the smallest public provision is made, this institution is earnestly deserving of support;" at the same time the following gentlemen are requested to form a Committee to carry out the design:—Lord Robert Grosvenor, M.P., Chairman; the Viscount Campden; the Very Rev. the Dean of Ely; Lord Clarence Paget, M.P.; Sir James Clark, Bart., M.D.; Sir David Davies, M.D.; Archibald C. Ross, M.D.; J. Bampfylde Daniell, M.D.; Sir John Pirie, Bart.; Captain D'Arcy; Edward Harcourt, Esq.; Lieut-Col. Hartley; Henry G. Hulse, Esq.; Edward Loyd, Jun., Esq.; William Lyon, Esq.; Benjamin Oliveira, Esq.; James Sheppard, Jun., Esq.; W. T. Haly, Esq., Honorary Secretary.

The list of subscribers already published furnishes both a guarantee of respectability, and also an assurance that friends will be forthcoming to aid this useful establishment, which has long been a desideratum for affording that relief, which is only given by a change of climate, to those whose situation in life is such as to preclude all chance of otherwise obtaining it.

THE WET SHEET AND CHLOROFORM IN CHOLERA.

In corroboration of an opinion expressed in our last number, we have been informed that the wet sheet practice has had a fair trial on the cholera patients admitted into the London Hospital; but although it had the effect of producing a genial warmth of the skin, and bringing about reaction, *all the patients died*. Chloroform was employed in five cases admitted into King's College Hospital, both in the form of vapour and internally as a liquid, but all the cases terminated fatally. Facts of this kind properly recorded will clear the way for improved treatment. If we cannot yet suggest any successful method of treatment, it is something to know what to avoid, by keeping an honest record of those plans which have been fairly tried, and have been found to fail.—*Medical Gazette*.

THE CHOLERA IN THE UNITED STATES OF AMERICA.

Up to the middle of July the accounts are very unfavourable; there was, however, a decrease in the number of cases at New York. On the 19th of July only eighty-seven cases and thirty-six deaths were reported, these figures being considerably lower than the returns of the previous days.—*Lancet*.

MORTALITY OF THE METROPOLIS.

Deaths during the week ending Saturday, August 11th, were 1909, a diminution of 58 as compared with the previous week. Small-pox, scarlatina, and hoop-

ing cough are comparatively quiescent; typhus is more fatal than it was. The excess of 901 deaths over the average, is due to diarrhoea and cholera, which were fatal to 173 and 823 persons. Deaths from cholera during the six last weeks, were 152, 339, 678, 783, 926, and 823. The improvement is chiefly confined to West London, Poplar, St. George, Southwark, Newington, Camberwell, and Lambeth. The deaths from cholera in the last two weeks were 29 and 48 in Wandsworth; 9 and 21 in Pancras; 4 and 14 in Islington; 3 and 10 in London City; 16 and 35 in Bethnal Green; 15 and 35 in St. Giles. The deaths from all causes on the north side of the Thames (1118) were 89 more than the deaths (1029) of the previous week.

SIR JAMES CLARK.

We have much pleasure in stating that, during his recent visit to Ireland, with the Queen, Sir James Clark has been elected an honorary fellow of the Irish College of Physicians. This is, we believe, an honour very rarely bestowed; and it will be allowed, by all liberal men, to be the more deserved in the present instance, from the fact that Sir James was one of a very small minority of London licentiates who refused to accept the fellowship of the London College, when offered by them, from a conscientious feeling that the great body of licentiates had been unfairly treated, by the College withholding privileges to which they felt themselves to be entitled.—*Lancet*.

THE COLLEGE COUNCIL.

There are two more vacancies in the governing body of the Royal College of Surgeons, which was so recently filled up,—viz., by the death of Mr. Goldwyer Andrews, and the resignation of Mr. R. Welbank.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, August 10th, 1849:—C. H. Payne; A. P. Childs; J. Parker; R. Jones; W. H. Peacey; T. W. A. Rawlins; S. J. Tracy; R. Symes; J. Tilby; S. Reeves; W. Holman; W. Monday; B. C. Dolman.

Gentlemen admitted members on Monday, August 13th, 1849:—R. Close, E. J. Daniel; E. Suell; R. H. Wilson; G. Elin; T. W. Williams; A. E. Fitzgerald; B. A. Robinson.

Gentlemen admitted Members on Wednesday, August the 15th, 1849:—C. Crandell; B. Eyston; W. W. Jones; G. Smith; T. C. Blanchard; E. R. Ray; T. P. James; T. W. B. Greaves; J. Breach; H. B. Lillie; R. Lee; W. S. Browne.

Gentlemen admitted Fellows on Thursday, August 16th, 1849:—S. A. Bindley, Birmingham; P. L. Burchell, Kingsland Road; E. D. Hacon, Hackney; E. L. Hussey, Oxford; H. T. Leigh, Turnham Green; T. Littleton, Saltash, Cornwall; J. Morgan, Albion Place, Hyde Park Square; E. Palmer, Westminster; G. H. Smith, Stevenage, Herts; F. Wildbore, Ealing, Middlesex, late House-Surgeon to the Westminster Hospital.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Members on Thursday, August 2nd, 1849:—Thomas William Shea, England; John Syer Bristowe, England; Charles Morgan, England; Edward Manley, Manchester; Walter Battershell Gill, London; Samuel Curtis Candler, Beccles, Suffolk; Frederick William Napoleon Wilson, Newcastle-upon-Tyne; George Garnham, Martham, Norfolk; James Fuller.

Gentlemen admitted Members on Thursday, August 9th, 1849:—J. Newton Coffin, Devonport; William Martin Hatfield, Chilham, Kent; John Langford, St. Leonard's-on-Sea, Sussex; Louis Parnell; James Rhodes, Manchester.

OBITUARY.

On Saturday, the 11th instant, at Henley-on-Thames, aged 77, John Henry Judson, Esq., forty-seven years a medical practitioner at Ware, Herts.

At Munster, in his 87th year, M. C. Bartholdi, Professor of Natural Philosophy, Chemistry, and Natural History, at the Central School of Colmar.

Lately, in the 70th year of his age, Sir Charles Scudamore, M.D., F.R.S.

Lately, Dr. Henry Burton, Senior Physician to St. Thomas's Hospital.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

NOTICE TO MEMBERS.

The Secretary presents his compliments to those members of the Provincial Medical and Surgical Association whose Subscriptions remain in Arrear, and begs respectfully to call their attention to the following Law, which was passed unanimously at the Anniversary Meeting, held at Bath, in 1848:—

"If any Member's Subscription remain unpaid twelve months after it shall have become due, the Medical Journal and other publications of the Society shall be withheld from such Member till his arrears be paid."

He earnestly entreats all those gentlemen whose Subscriptions are now in arrear, that they will cause them to be paid, either to himself, or to the Treasurer, Dr. Hastings, without further delay.

JAMES P. SHEPPARD,

Secretary to the Association.

Worcester, August 6th, 1849.

ERRATUM.

In the report of the proceedings at Worcester in the last number, at page 429, for "Dr. Cormack, of Putney," read "Dr. Lingen, of Hereford."

TO CORRESPONDENTS.

Communications have been received from Mr. Sloman, Mr. Humphry, Mr. Hare, Mr. Crouch, Mr. Daniell, Mr. Martin, Mr. Yearsley, and Mr. Newham.

In consequence of the lamented death of Dr. Streeten, it is requested that all letters and communications be sent to J. H. Walsh, Esq., Foregate Street, Worcester. Parcels and books for review may be addressed to the care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A SUCCESSFUL

CASE OF OVARIOTOMY,

BY THE

LARGE ABDOMINAL SECTION.

By JOHN CROUCH, Esq., M.R.C.S., M.S.A.,

Surgeon to the Bruton Hospital, and formerly House-Surgeon to the Winchester Hospital.

CASE.—*Previous History.*—Fanny Weeks, aged 24, of healthy habits and appearance, resides in an agricultural district of Somersetshire, and has been accustomed to gain her livelihood in the winter, as a sempstress, and in the summer, by working in the fields. The catamenia have appeared regularly and sufficiently since her fifteenth year, and she enjoyed good health until the year 1847, when she first perceived the abdomen to become hard and distended, particularly in the left iliac region, accompanied occasionally by severe dragging pain. As these symptoms were supposed by her to have been caused by corpulence and a costive habit of body, she consulted no one about them for several months.

In the spring of 1848, she underwent a course of aperient medicine, without any benefit. As her complaint still increased, she consented, in the following summer, to an examination of the bowels.

The appearance of the abdomen gave rise at first to strong suspicions of pregnancy, and resembled that of a woman about five or six months advanced. But on carefully examining the tumour, which extended from the left iliac region to the right hypochondrium, it was found to be of an irregular shape, more solid at some points than at others, and in the upper part fluctuation was clearly perceptible to the touch. Several of my medical friends agreed with me, that it was an encysted ovarian tumour, but recommended the patient to wait as long as possible before paracentesis abdominis should be performed. The uterus was afterwards examined, per vaginam, and found to be in a natural and healthy condition.

In May, 1849, at her earnest request, I drew off with a trocar, seven pints of a coffee-coloured fluid, of a serous character, and highly charged with albumen.

The irregularities of the tumour could now be more distinctly perceived, and on the right side of the umbilicus a hard solid substance could be traced, the diameter of which was five or six inches from side to side, and still more than that from above down-

wards. Of course it was impossible to ascertain the extent of the tumour below, as it would naturally by its own gravity descend into the cavity of the pelvis. The substance was quite moveable above, except for an inch or two anteriorly opposite the denser part. The patient was made to lie on one side, and the tumour being grasped by both hands, and brought forwards from the spine, it was thought to communicate the feeling, that it had contracted no adhesions to the viscera posteriorly, and the fingers could be passed almost behind the cyst.

It was strongly suspected at the time that some smaller cysts containing fluid remained unopened, but fluctuation was very indistinct. The nature of the disease was then fully explained to the patient, and she was informed that the operation of tapping, could only relieve her for a time, but never ultimately cure her, although her life might be prolonged for a few years by having recourse to it.

The "radical cure," by extirpation of the cyst was also described to her, and the danger and extent of the operation fully dwelt upon, when, without hesitation, she not only consented to it, but was always most urgent in requesting that it should be performed, with the least possible delay.

The cause of this importunity the mother freely acknowledged, was, that she had contracted an engagement of marriage, which her condition rendered her unable to fulfil.

On the evening of the 8th of July, preparatory to the operation, she took ten grains of the inspissated ox gall, which dose was repeated on the following morning, and produced two copious and good evacuations. The bladder was completely emptied, indeed she had been unable for some time, from the pressure of the tumour above, to retain the urine for more than an hour, except when she was in the recumbent posture.

The uterus was again carefully examined, per vaginam, while the patient was standing, and pronounced healthy, as far as the os and cervix were concerned. The fundus was found to be unnaturally pressed forwards under the arch of the pubes, not, it was inferred, from any disease of itself, but from the superincumbent weight of the ovarian tumour.

At one o'clock, on the 9th of July, I proceeded to perform the following operation, kindly and ably assisted by my friends, Dr. Surrage, of Wincanton; Mr. T. G. Stockwell, of Bath; Mr. F. J. Sandford, of Bruton; and by my brother, Mr. W. R. Crouch. The temperature of the room ranged from 80° to 85°.

The chloroform, although prepared, was not administered, as a majority of my medical friends, on the authority of Dr. Clay and others, were decidedly against its use.

Operation.—Having marked out with a camel-hair brush, and iodine paint, five transverse lines across the linea alba, for the insertion of sutures, I commenced an incision into the skin and cellular membrane, about three inches above the navel, and extended it to the length of nine inches, towards the pubes, avoiding the umbilicus by about half an inch. I then opened the peritoneum midway between the umbilicus and pubes to the extent of an inch. The character of the tumour being now ascertained, I quickly extended the opening of the peritoneum to the length of the external incision. A large white cyst now partly protruded itself through the opening, evidently the one that had been previously tapped. On making an incision into it, about five pints of the same kind of coffee-coloured fluid as before, were let out; and these had collected in as many weeks. Four other separate cysts were then punctured, each containing from half a pint to a pint of fluids of different colours and consistencies. This reduced the tumour to about one third of its original size, and enabled us easily to examine its connexions and the condition of the surrounding viscera. The only adhesion that existed was between the solid part of the tumour in front, and the abdominal parietes, midway between the umbilicus and the right crest of the ileum, to the extent of two square inches. This adhesion was easily divided with a blunt bone knife. A great number of small cysts were found closely impacted in the cavity of the pelvis; on raising these Dr. Surrage pronounced the uterus and the right ovary to be in a perfectly healthy condition. The pedicle of the tumour was then easily discovered, and was situated, as predicted, in the left broad ligament of the uterus. Its thickness, when pressed together, was not greater than a middle-sized finger.

A suture-needle, armed with a double thread of very strong ligature twine* was then made to pierce the centre of the pedicle near its uterine extremity, and the needle being cut off, two of the four ends were tied very tightly in opposite directions, as in the operation for the cure of a nœvus. This was done in two different parts of the pedicle. Four of the eight strings were then cut off, and the other four were placed at the lower end of the external incision. The tumour was now excised. The tying of the pedicle was the most painful part of the operation, and the only one of which my patient complained.

The external incision was then accurately brought together with five interrupted sutures. To obtain this accuracy, the iodine paint lines, suggested by Mr. Sandford, answered remarkably well. A narrow compress of linen was placed on each side of the wound, and long broad straps of adhesive plaster were carried from the back and loins of one side over the incision, to the back and loins of the other side, from the epigastrium to the pubes. A roller was not applied

around the bowels, as it was deemed inconvenient to remove, but a small toilet table-cloth was carefully pinned, in imitation of the "Dublin obstetric binder," so as to afford equal support to the whole abdominal parietes, and that without the power of slipping. This application, suggested by Mr. T. G. Stockwell, was found very convenient and serviceable, both here and in the after treatment of the case.

The whole operation occupied twenty-three minutes, and was performed without the loss of an ounce of blood. The patient was then carefully placed in her bed, complaining of pain in the left side only, opposite the part where the pedicle was tied; pulse 80; skin warm and moist; no hæmorrhage. A grain of the acetate of morphia was given in the form of a pill.

Report of the Case Three Hours after the Operation.—The morphia not producing sleep, forty drops of Tinct. Opii were given, two hours after the operation, by Mr. Sandford, who kindly remained with the patient till five o'clock. Since the operation she has complained of severe pain in the left iliac region, and of an empty aching in the stomach and loins. Has had also a strong desire to pass water, and begged most earnestly to have something to eat, but this was strictly forbidden. Pulse 115; no hæmorrhage. The rapidity of the pulse was attributed as much to the opiate as to the shock of the operation.

Nine o'clock P.M.—Has had an hour's sleep, and is now almost free from pain, and the desire to pass water has gone off. Pulse 100, soft and compressible; skin moist; tongue clean. Ordered to be kept perfectly quiet, and to take nothing but a little soaked bread and toast and water.

Second day after the operation.—Has passed a good night; the pain in the left side has much abated, and recurs only occasionally; urine has been passed by the natural efforts; pulse from 90 to 100, quite soft; skin perspiring; tongue clean. A tube was passed into the rectum, to relieve flatulency, with immediate good effect. The abdomen is quite free from distension and pain, and tender only opposite the seat of the pedicle.

From this period the case may be said to have progressed, under the most simple management, without a single bad symptom. The objects of the treatment were to keep the system in a state of depletion, in order to prevent inflammation; to trust as much as possible to the restorative powers of nature, and to interfere, with medicine, only when absolutely required.

The excellent rules laid down by Dr. Clay, with regard to diet and beverage, were strictly adhered to, and a plainly-written copy, as follows, put into the hands of the nurse:—

"Diet and Beverage.—Boiled bread, bread out of toast water, toast water, gum mucilage, thin arrow root, and gruel, for the first six days; and up to the twelfth day only boiled rice, a little milk with the arrowroot, and a little weak tea to be added." To a rigid and undeviating attention to these rules I attribute, in a great measure, the entire absence of all inflammatory symptoms.

Third day.—Three of the five sutures were taken out of the incision, and all the straps of adhesive plaster were removed except two. The wound, as far as it

* This twine was composed of a superior quality of hemp, and would support a weight of thirty-six pounds.

was uncovered, was united by the "first intention." The bowels were quite flat and free from tenderness, as well as pain. She had slept well the previous night; urine and flatus had both passed freely by the natural efforts; no motion. The catamenia had appeared in the night, followed by an almost entire relief to the tenderness opposite the pedicle. The wound was dressed with straps of adhesive plaster, as before. No medicine ordered.

Fourth day.—Quite comfortable; pulse 80; skin and tongue as before.

Fifth day.—The other two sutures were taken out, and the incision was found to be united throughout its whole extent, except where the ligatures of the pedicle passed out. At this point matter had begun to discharge freely. No movement of the bowels.

Sixth day.—Up to this period no medicine of any description has been administered since the day of the operation, and I should have been more anxious about the sluggishness of the bowels if the patient had not been kept so low as to complain heavily of being almost starved. She had taken no food whatever for *twenty-four hours before the operation*, and only two table-spoonfuls of soaked bread the day it was performed, since which time she has never exceeded a tea-cupful of soaked bread or gruel in the course of twenty-four hours. As the bowels had not acted, a simple gruel injection was this day exhibited. In other respects doing well.

Tenth day.—Has passed the last four days quite comfortably, although the bowels have not been relieved. Since the last report she has taken three doses of the inspissated ox-gall, each dose containing ten grains, and has had three enemas of gruel, the last having ten grains of ox-gall dissolved in it. About half an hour after the last injection she passed, without pain or uneasiness, a healthy and copious evacuation. In other respects improving rapidly.

Eleventh day.—A motion was this day passed by the natural efforts, and the urine is increased in quantity, and is of a healthy character. The ligatures of the pedicle being quite firm, were fixed to a small roller of adhesive plaster, and after gentle traction, were fastened to the skin at a little distance from the opening. Discharge healthy and less in quantity.

Twelfth day.—Much better; able to sit up in bed. Was allowed an egg for luncheon, and a mutton chop for dinner, which she eat with great relish, having evinced hitherto a thorough dislike to chops. A healthy motion was this day passed without the aid of medicine.

Fourteenth day.—Much improved; sat up out of bed for a quarter of an hour.

Seventeenth day.—Says she is quite well, and wishes to sit up and be dressed.

One of the four ligatures of the pedicle came away on the eighteenth, and a second on the nineteenth day after the operation.

August 11th, thirty-third day after the operation.—During the last fortnight nothing has occurred to prevent the complete convalescence of the patient. She has returned to her usual habits, and is gaining flesh and strength rapidly. Yesterday the catamenia appeared

after the usual interval, for the second time since the operation. The last two ligatures, which had been gradually working their way to the surface, came away to-day, leaving only a small healthy sore, which promises to heal in a few days. The only medicine taken since the last report has been an occasional dose of the inspissated ox-gall.

16th.—The sore is now healed, and her health, in every respect, with the exception of debility, quite re-established.

The measurement of the abdomen, prior to the first tapping, and a fortnight after the operation, afforded the following results:—

	Before tapping.	After operation.
From sternum to pubes	18 inches	11½ inches.
Circumference of the body at the umbilicus	47 "	26 "

Description of the tumour after its removal.—The weight of the solid part of the cyst was nearly four pounds; its circumference was not less than eighteen inches, and must have required an incision of nine inches for its easy removal. The fluids measured nine pints, making altogether, solid and fluid, nearly fourteen pounds. The number of separate sacs was not fewer than *two hundred*. The larger ones contained a serous fluid, like that obtained at the first tapping; some of the smaller ones were filled with a glairy liquid, like white of egg; and a third set afforded a thick semi-solid substance, like dough or peas-pudding. The whole mass of cysts, when emptied of their contents and distended with tow, measured at its largest diameter thirty inches, and at the smaller part nearly two feet. The shape of the tumour is very irregular and difficult to describe. At the lower part a mass of cysts projected from the rest of the tumour, forming the part which filled the cavity of the pelvis. Two large arteries accompanied the enlarged Fallopian tube to its fimbriated extremity and then meander over the whole cyst.

REMARKS.

The relation of this case affords me an opportunity of alluding briefly to the operations that have at different times been proposed for the removal of these troublesome tumours.

The "major operation," performed by making an incision from sternum to pubes, and removing the cyst *entire*, first practised by Macdowal and Lizars, and introduced successfully into England by Dr. Clay in 1842, is seldom had recourse to at the present day, and was clearly not required in the above case. For, although it was impossible before the operation to ascertain the exact dimensions of the solid part of the tumour, yet I had good reasons for supposing, from actual measurement, that an incision of nine inches would allow the passage of the cyst, even supposing that its pelvic portion had been equal in size to the full grown fetal head. In making this extent of opening, I bore in mind the maxim of Dr. Clay, "that in all cases the incision should be proportioned to the size of the tumour to be removed."

The "minor operation," consisting of an incision of from one to three inches, originally suggested by Dr. W. Hunter, and first practised by Mr. Jeaffreson, would

have been of no avail to my patient, although it has been successful in some cases of unilocular cysts.

The third, called also the "four-inched" or "median operation," proposed by Dr. Frederick Bird in 1843, would not have enabled me to meet all the obstacles I had to encounter, yet it has met with eminent success in the hands of its originator, who, up to 1847, had succeeded in seven operations without one fatal result.

In performing the operation I endeavoured to avoid some of the errors of my predecessors, as well as to benefit by their experience. The manner in which the pedicle was tied, by two strong double ligatures, I consider the best and safest practice; and strong reasons exist for supposing that two recorded cases might have been saved, if a similar plan had been pursued.

One of the fatal operations alluded to was performed at St. Thomas's Hospital, by the eminent surgeon Mr. Solly, and is recorded in the *Medical Gazette* of the 10th of July, 1846. The other is described as "Case eighth" in Dr. Clay's very interesting "Results of Ovariectomy."

As a great deal has been written in some of the medical periodicals of the last few years strongly decrying "ovariotomy," under almost any circumstances, however favourable, I cannot refrain from offering my humble opinion that it is a perfectly legitimate and justifiable operation, if performed on a person of an otherwise healthy constitution, and had recourse to in suitable cases.

So far from recommending my patient to wait, as some of these writers would have done, till after "medicine" and "pressure," and "paracentesis abdominis" had been repeatedly resorted to, I considered that the best, if not the only chance she had of obtaining a "radical cure," was by having recourse to the operation before inflammation had set in, and consequent adhesion had formed. There had been no symptoms of peritonitis before the operation, the only pain complained of was from the dragging of the pedicle of the tumour, consequently I had only one adhesion to divide, and this had been formed clearly from the friction of the solid part of the cyst against the abdominal parietes. The patient informs me that if it were not for the tying of the "root" of the tumour, she would be willing to undergo the operation a second time.

Analysis of the fluids.—Some days after the operation I forwarded specimens of the contents of the cyst to my friend Dr. Hodges, of Bath, who had kindly offered to submit them to analysis, but they were then so much decomposed as to be unfit for analysis. My own observations only enabled me to ascertain that the fluid contained a large proportion of albumen, and did not produce any effect on litmus or turmeric paper.

P.S. I have in vain endeavoured to obtain the statistics of the operation up to the present time. It is due, however, to the following gentlemen, to state that prompt and courteous replies have been received to inquiries on the subject, from Dr. Clay, Messrs. Crisp, Dicken, R. Druitt, Jeaffreson, Lane, B. Phillips, Solly, and Southam, to all of whom I beg to acknowledge my obligations.

If any of the readers of the *Provincial Medical and Surgical Journal* will kindly assist me in obtaining information on the subject, I shall feel greatly indebted to them. My object is to ascertain the number of operations that have occurred in England—in how many cases the cyst was removed entire—how many times the different operations by the "large," "median," and "minor" abdominal sections have been performed—and whether fatal or successful—and, lastly, the results of those operations in which the tumour was found unfit for extirpation.

Bruton, August 13, 1849.

ON

LATENT AND CIRCUMSCRIBED PLEURISY, WITH EFFUSION.

By C. M. DURRANT, M.D., Ipswich.

(Read at the Suffolk Branch Meeting, held at Hadleigh, Friday, June 15th, 1849.)

The subject to which I wish briefly to draw the attention of this meeting is "Latent and Circumscribed Pleurisy, with Effusion." So frequently have I found this affection in patients, who, themselves and friends, have been unconscious of the existence of any but the most trifling symptoms of chest disease—and indeed this is often one of its characteristic features—that I feel that it is a subject well worthy of investigation, being one which, in the every-day routine of an extensive and fatiguing general practice, is not unlikely to be overlooked.

I have found this condition of the chest among all classes of society, but from the collateral and depressing influences which exert so powerful an effect upon the diseases and constitutions of the poor, it is among them that the disease under consideration will most frequently be found.

Differing from general and acute pleurisy, in which the liability to attack is so greatly in favour of the male sex, I have not found in the latent variety that either sex is especially prone to its invasion. According to my own observation, however, although I have met with it in the aged as well as in the adult and children, by far the greater number of cases which have fallen under my notice have occurred among the latter, and in those chiefly under twelve years of age. The subjects in whom latent pleurisy has existed have presented usually either the lymphatic or bilious temperament, and the latter, perhaps, more frequently than the former.

As it is my intention to confine myself solely to the practical consideration of the disease, and to be as brief in my observations as possible, I shall at once allude to its general aspect more particularly in reference to its diagnosis and treatment.

I may state, *in limine*, that as the circumscribed form of latent pleurisy differs only in the adhesions by which the contained fluid is confined to certain portions of the walls of the chest, I shall at present include them under one head, making such reference

respectively as will best elucidate their practical consideration.

The common history among hospital patients is this:

—The mother states that her child has been ailing for some weeks, or possibly months; that he emaciates, and loses strength; that he has no cough, or if any, that it is very slight and dry, and in general there is absence of pain; indeed the mother expresses herself unable to reconcile the more prominent symptoms with the small amount of existing local disturbance.

On more minute examination we find the countenance unhealthy and pallid, but we are probably told that it becomes flushed towards evening. The eyes are unnaturally bright and prominent, provided there be no co-existing pneumonia, when they are characteristically heavy and dull; there is often slight emaciation. The digestive organs in general perform their functions healthily, and the appetite is tolerably good. The pulse is almost invariably quickened. On further inquiry we find that the attack is often traced to a cold; that in the onset there may have been a slight pain in the side, but as frequently none. The cough, if any exist, has been dry and hacking, but by no means severe, and on closely questioning the patient himself we may often elicit the fact that there has been uneasiness, not amounting to pain, felt in one or other recumbent posture, and that the breathing has been for some time past slightly accelerated by any attempt at active exertion, which latter symptom is invariably attributed by the patient to weakness. Such, with the physical signs which we shall presently consider, under the head of diagnosis, are the leading features which present themselves to our notice in this often obscure form of disease.

Its characters generally are asthenic, and it is often found as a sequela to, or complicating diseases of, an adynamic type, as the convalescence from typhus, and the exanthemata, more particularly scarlet fever, granular degeneration of the kidneys, and other maladies, giving rise to a cachectic condition of the system.

The importance of a correct *diagnosis* cannot be too strongly urged, as upon it alone must be based the appropriate treatment of the case; and although in its primary and uncomplicated form I believe that it does not, so frequently as is supposed by some authors, act as a direct excitant to tuberculous disease, it nevertheless, by its latency, engenders sooner or later, that cachectic state of habit which, in the hereditarily predisposed, becomes so readily a nidus for the deposit of tubercle. In addition to the symptoms above enumerated, we are at once led, from the insufficiency of these alone, to institute a careful physical examination.

It will be desirable, if possible, to have the chest of the patient perfectly uncovered, as the results of inspection and palpitation become valuable adjuvants to diagnosis. If any considerable amount of fluid obtain, we shall find that the motions of the ribs upon the affected side are diminished, and that in extreme cases this portion of the chest compared with the opposite is rendered immobile. The intercostal spaces in latent pleurisy

are not usually affected. If the fluid be circumscribed these phenomena are of course limited in extent, and sometimes confined solely to the mammary region.

On applying the hand to the chest, the natural vibration produced by the voice or cough is either diminished or abolished. This sign is of less value in circumscribed pleurisy, if it obtain in the upper or middle portions of the chest. I have never detected the existence of rubbing vibration in this asthenic variety of the disease.

Percussion yields a diminution of clearness and resonance over some part of the chest, in general influenced by the position of the patient, even if the amount of fluid be small, and of course limited to the lower portion of the chest, unless the effusion be circumscribed, when the differential diagnosis between it and circumscribed asthenic pneumonia, chronic phthisis, or malignant disease within the chest, in an inactive stage, requires very careful discrimination. The auscultatory signs of latent pleurisy are diminished and feeble respiratory murmur, although occasionally, and more particularly when circumscribed, it assumes a diffused blowing character, but this is rare. Perfect œgophony is seldom audible, but a modified bronchophony will be found pretty generally to obtain. It is not in itself a sign of much value in the diagnosis. The friction sound is equally inconstant, and when audible it is generally in its reduced form, when a portion of the fluid has been removed by treatment.

If, then, in a patient of cachectic habit, who has been for some time ill, whose countenance presents the features of internal disease, having the symptoms above detailed more or less delineated, even should cough and dyspnoea be wanting, we ought at once to make a careful exploration of the chest, when very frequently will be found those physical signs which will at once give confidence to treatment, and clear up the diagnosis of an otherwise doubtful case.

The prognosis of this variety of pleurisy, inasmuch as it effects the life of the patient, is favourable, but as it is latent in its origin and advance, so it is often essentially tedious and chronic in its progress towards recovery.

Under these circumstances it is a wise proceeding to caution the friends of the patient, that they may not be disappointed at the sometimes apparently little progress that is made towards a cure; yet, notwithstanding these precautionary observations, I may remark, that judicious treatment often exerts a very decided influence upon the disease, exciting the absorbents, and removing every vestige of deposit.

In the treatment of latent pleurisy, general venesection will, I believe, in no case be requisite. Topical bleeding, by cupping or leeches, may occasionally be found necessary, more particularly if pain, heat of skin, or other indications of increased action obtain; but even these latter measures, in the majority of cases, will be uncalled for.

In mentioning counter-irritation, I would eschew all forms of it, with the exception of blisters, and a strong solution of iodine; and these, particularly the former, are often invaluable. I have so frequently witnessed

the application of croton oil and tartar emetic in this affection unattended by any result, save annoyance to the patient, that I feel no hesitation in dissuading from their adoption.

In applying blisters, these should be large, as they exert a more decided influence, without producing an increased amount of irritation. On their removal it is better to allow the vesicated surface to heal, than to promote a discharge by savine or other ointments. A succession of blisters, which are frequently needed, may thus be applied, and by which method I am satisfied that the absorbents are more decidedly affected than by preventing the healing of the original blistered surface by irritating applications.

It has been recommended to paint the affected spot with strong tincture of iodine; and provided that free and repeated blistering have been previously had recourse to, and failed in exciting the absorbents, the application of this solution, repeated according to circumstances, will sometimes be found of use. In addition to counter-irritation, I need scarcely allude to the value of mercury, so administered as gradually and gently to affect the system. We must, however, never lose sight of the fact, that in cachexia the effect of this mineral, even in its mildest forms, is sometimes unexpectedly severe and unmanageable. If the symptoms are not distressing, perhaps the best preparation will be found to be the biniodide, in doses of one grain every night, or night and morning, according to the amount of disease and urgency of the case.

Strict attention to the functions of the digestive organs, prior to the administration of the iodide of potassium, will be found to be necessary; or if these be healthy, as evidenced by a clean and not morbidly-red tongue, the exhibition of this medicine from the commencement of the treatment will be desirable. The only other remedy that I shall notice is the comparatively recently introduced cod-liver oil. In some cases, more particularly, if there be emaciation and debility, its prolonged use (which will not interfere with the exhibition of other remedies,) will be attended with marked benefit, and prove a valuable auxiliary to general constitutional treatment. Such is a very brief outline of this often obscure but important disease; important, both from the amount of mischief that may exist, independently of any marked symptoms indicating its presence; and important also, both in reference to the well-being of the patient, and the professional credit of his medical adviser.

CHLOROFORM IN TETANUS: RECOVERY.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Should you consider the accompanying case of sufficient interest to be recorded, I shall feel obliged by your inserting it in your Journal. It appears to me especially important to have as many facts as can be obtained, in order to ascertain as far as possible the

utility of chloroform, both taken into the stomach and by inhalation. I have given it several times internally in doses of from five to seven minims, repeated every two or three hours, for several times, and have never yet found any ill effects from it; but there is one caution which is very necessary to be given to every patient who may have to take it, viz., that it must be *well shaken before taken*, as it separates completely from any ordinary vehicle, and if *not well shaken*, the last dose would contain all the chloroform. I mention this fact, having accidentally discovered it just in time to save a patient of mine from such a catastrophe. I have given chloroform in two cases, of what I considered, real Asiatic cholera, and its effect in allaying the spasms and tranquillising the system was most marked; in each case I gave it about every two hours, for four or five times, until in fact the danger seemed past, and reaction was fully restored. I should add, I gave calomel as well, in repeated doses. Its effect in allaying the agonizing spasm and opisthotonos in the accompanying case of tetanus, was equally satisfactory, and I sincerely hope that others who may have opportunities of trying its effects, will favor the profession with the history of the cases, as chloroform is certainly a most powerful and valuable agent, and it is, therefore, very important to ascertain in what cases it is applicable.

I remain, Sir,

Your obedient servant,

S. GEO. SLOMAN.

Farnham, August 9, 1849.

George Alderton, aged 45, an agricultural labourer, of spare habit, was run over by a cart on the 27th of June, and cut severely the cartilage of the right ear, fractured the clavicle close to the sternum, and complained of having hurt his neck very much, but had no marks of external injury. Three sutures were applied to the lacerated ear, and cold dressings. He went on tolerably well, and walked to the surgery every day, but continued to complain of stiffness of the neck, but no special pain, for which he was ordered a stimulating embrocation, until the 12th of July, fifteen days after the accident, when he complained of much pain in the neck and chest, and in the region of the diaphragm, I then ordered him the following mixture:—Vin. Colchici, dr. ij.; Liq. Opii Sed., m. xl.; Liq. Ammon. Acet., oz. iss.; Mist. Camph. ad, oz. vj. M. Sumat coch ampla, ij., quartis horis.—R. Extr. Coloc. Co., gr. viij.; Pulv. Opii, gr. j. Fiant Pil. ij., hora somni sumend.

July 13th.—Much worse; unable to walk to the surgery; pain in the neck and chest worse; has stiffness of the jaws, and great difficulty in swallowing. Ordered Mist. Aper. primo mane.

14th.—Continues much the same; had a bad night, and the jaws are fixed; has spasms occasionally during the day. Continued the colchicum and opium.

15th.—Spasms much more violent at twelve o'clock. I gave Cal. gr. v., Opii gr. ij., and repeated it in an hour, which gave him temporary relief. At seven p.m. I found him in the greatest state of suffering, rigid spasm in every limb, and in the abdominal muscles, with considerable opisthotonos; jaws completely fixed; unable to swallow liquids without much difficulty. I

then put one drachm of chloroform, (which I had taken with me,) on a handkerchief, and applied it over his mouth and nostrils, and in a very short time it produced perfect unconsciousness; the effect of it was most satisfactory. He first, (after the commencement of the inhalation,) expressed himself as perfectly easy, and all the spasm ceased, and he lay composed on the bed; he then became delirious, and in a very short time quite unconscious, and then slept soundly for two hours. At nine p.m. he awoke, and the spasms began to return; I repeated the inhalation of chloroform. At half-past eleven p.m. the spasms had not returned since the last inhalation, and he has slept well. I repeated the inhalation, after which he slept until three the following morning.

16th.—At three a.m. the spasms returned with increased violence, and at five a.m. the chloroform was again inhaled, but it required more to produce the same degree of insensibility as at first. At nine a.m. the spasms returned, and he had but little sleep since the last inhalation. Chloroform was repeated, and allayed the spasms for a short time, but they returned at half-past ten a.m., and as the chloroform appeared to be somewhat losing its effect, I gave him five grains of calomel, and half a drachm of the solution of bimeconate of morphia, which latter was repeated every two hours, and three grains of calomel every four hours.

17th.—Spasms less violent, and at longer intervals. Continued the bimeconate of morphia, with two grains of calomel every three hours.

18th.—Spasms less in intensity and frequency; bowels freely open, but not relaxed. Continued the bimeconate of morphia every three hours, and the calomel every six hours. The ear looks well; union has taken place.

19th.—Spasms much diminished; can lie in bed during the spasms; moves his jaw when speaking, and can swallow better; bowels continue very open.

20th.—Has had a good night; bowels very much relaxed. Discontinued the calomel. Continued the bimeconate of morphia.

July 21st.—Bowels very much relaxed. Ordered m. xl. of the bimeconate of morphia *primo mane*, and then continued the morphia as before, and commenced giving Zinc. Sulph., gr. j., *octavis horis*.

22nd.—Had a good night; bowels steady; can open the mouth better. Continue medicines as yesterday.

23rd.—Had as much sleep as usual. Continue medicines as yesterday.

24th.—Continues much the same. Diminished the dose of morphia, and increased the Zinc. Sulph. ad gr. ij., *ter die*.

25th.—Altogether better. Continue medicines as yesterday.

26th.—Continues improving in every respect. Decreased the dose of morphia to m. xx., and increased the Zinc. Sulph. ad gr. iij., *ter die*.

27th.—Had a comfortable night; pulse quite quiet and regular; sat up a little in bed, and eat some mutton. Decreased the dose of morphia to m. xv.

28th.—Improving rapidly. Reduced the bimeconate of morphia to m. x., *ter die*. Continue Zinc. Sulph., gr. iij., *ter die*.

29th.—Continues going on well. Medicines repeated as yesterday.

30th.—Still going on very well. Reduced the dose of morphia to m. vij., and increased the Zinc. Sulph. ad gr. iv., *ter die*.

31st.—Mending daily. Reduced the dose of morphia to m. v., and increased the Zinc. Sulph. ad gr. v., *ter die*.

August 1st.—Still improving. Got up for the first time and walked round the room. Countenance regained its natural expression. Medicines as yesterday.

2nd.—Going on very well; takes the morphia only at bed-time. Continue Zinc. Sulph., gr. v., *ter die*.

5th.—Continues gaining strength, &c. Medicines as last report. He fell down and shook himself very much, and complained of some pain in the neck, but, notwithstanding, he was able to come down stairs, and walked out of doors for the first time.

August 8th.—Continues daily improving

CASE OF

ANEURISM OF THE ARCH OF THE AORTA, SIMULATING LARYNGITIS.

By C. H. KINGDON, M.D., EDIN., Exeter.

A sailor, aged 36, on his return from his voyage, sent for me on the 18th of June, 1849. I found him resting his head on his hand supported by a table. His appearance was that of a person extremely fatigued. He was a stranger to me. On answering my first question, there was such feebleness of voice, and yet such distinctness in the intonation, that I at once asked his wife if it were his natural voice, and if she had remarked any change in it. Her reply was, she should not have recognised it. His friends had observed a change in his figure, and deportment. His head bent forward and one side.

His history was simply this:—He had felt unwell for some time, had shortness of breathing and occasional cough, with but little expectoration; he complained of great pain in the back part of his neck, shoulders, and back; he could scarcely walk to his home, a distance only of a quarter of a mile. His pulse was slow, regular, and weak; great coldness of his skin; his tongue but little affected. He appeared to me to suffer from some depressing cause, as influenza and the like; yet his general indisposition was not sufficient to account for his debility. He was ordered to bed, and a saline mixture with an excess of ammonia was given at short intervals. He soon felt the benefit of his bed, and was to all appearance relieved by a profuse perspiration.

19th.—I found him lying low in his bed, breathing without difficulty, still complaining of pains about his shoulders and neck, and of some difficulty in swallowing, yet his food passed into his stomach readily; but his impression was that it did not reach it, and he almost asked to have something removed from his throat. I own I considered the symptoms indicated an approaching paralysis, but from what cause I could not determine. I thought the feebleness of the voice and the sensations in the œsophagus were dependent on the same obscure cause.

20th.—Complained much of oppression about his chest, coming on at short intervals; he was advised to apply mustard poultices as often as the oppression returned. Still not satisfied about the state of his throat.

21st.—His condition was much the same; the mustard did not irritate his skin, he was therefore advised to add some turpentine. My visit was about ten o'clock in the morning; about one in the afternoon he was suddenly seized with a sense of instant suffocation, all the evidences of severe strangulation were present. His eyes most prominent; the whole surface of the body indicated the deepest state of venous congestion. Being from home, two medical friends passing his house were called to his assistance. The first and most natural impression was to relieve him by instant tracheotomy; but as I was soon expected, nothing was done. I found him at two o'clock in a state of profound insensibility, breathing with the utmost difficulty, and in a most profuse cold perspiration. I thought him *in articulo-mortis*. The bystanders considered his breathing rather less laborious. Sinapisms were ordered to his legs. Mr. Kempe visited him with me. We remarked an unusual appearance over the right supra-clavicular region, the integuments rose and receded, corresponding with his respiration. Towards five o'clock the spasm abated, his speech, though very feeble, returned, and with some difficulty he swallowed warm drinks. In the evening the spasms increased, the breathing became more difficult, there was again a remission, but the distress returned from time to time until he was released by death, thirty-six hours after the first attack.

The examination by the stethoscope did not clear up the difficulty of the diagnosis. His inspiration was clear and distinct, but in expiration the sound was very peculiar. I represented it as loud, abrupt, and as if the air rebounded from a rock.

The *post-mortem* examination gave the following appearances:—A muscular man; not wasted. The integuments over the upper parts of the chest slightly crepitated; no decomposition. The larynx, trachea, and bronchi, with the arch of the aorta, were removed. The larynx was found free from disease, or even obstructed by mucus. The epiglottis, and all parts, in a normal condition; the œsophagus free from disease. On dividing the posterior part of the larynx and trachea for three inches, the tube was healthy from thence to the bifurcation of the bronchi; it was intensely red, and for about an inch and a half of a deep purple hue, and dry. I was now endeavouring to account for an enlargement which I found resting on one side of the œsophagus and the trachea; it contained some recent coagulated blood. My next step was to lay open the arch of the aorta. This vessel was in a diseased condition, with steatomatous deposits. Immediately between the origin of the arteria innominata, and the left subclavian, I discovered the opening of an aneurismal tumour, about the circumference of a shilling. This tumour was about the size of a hen's egg, irregularly oval, containing some recent loose coagula, and some firm deposits of longer standing. There was great irregularity of the internal surfaces. The boundaries of the aneurism were by no means defined with the usual characteristic layers of coagula. Careful dissection discovered the recurrent nerve pas-

sing immediately under the body of the tumour; the examination therefore solved the difficulty of the case, and I feel, fully justifies the non-interference with the trachea, as a means of preserving life.

My own opinion leads me to attribute the attack of spasms to some sudden enlargement of the aneurismal tumour, interrupting the functions of the recurrent, and perhaps the superior laryngeal nerves.

The peculiar state of the voice, and the sensations in the act of swallowing, may be referred to the encroachment of the tumour on the trachea and œsophagus. But I leave the reader to draw his own conclusions.

My object in giving to the Association the above case, is to invite their attention to the consideration of the symptoms, antecedent to the severe struggle, which so suddenly deprived this man of life.

In a physiological point of view the case is highly interesting, considering our disposition to include under the term chronic bronchitis many difficult and anomalous cases of practical importance. Many cases are in my recollection of persons seeking to be relieved of bronchial affections, which have been complicated with diseases of the large vessels of the heart, and even of the heart itself.

TWO CASES OF

THORACIC PARACENTESIS IN THE INFANT.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

If you think the two accompanying cases worthy of a place in the *Provincial Journal*, it will afford me much pleasure to see them inserted.

As paracentesis thoracis in such young subjects is not of every-day occurrence, I have thought that these two parallel cases, presenting as they do so great a contrast in their progress and termination, cannot be altogether devoid of use or interest.

I have the honour to remain, Sir,

Your obedient servant,

SAMUEL D. FEREDAY.

Dudley, July 23, 1849.

CASE I.—PLEURITIS: PARACENTESIS: DEATH.

W. R., a healthy boy, ten months old, living in this town, was first seen by me on Nov. 9th, 1844. He had been fed by hand nearly from his birth, on account of mammary abscess in the mother; had cut six teeth three or four months. On the 7th of November he seemed poorly, refused his food, and had burning heat of skin; next day his breathing became very short and wheezing came on in the night. When I saw him his countenance was pallid and features sunk; pulse 148; the left side of chest raised as well as the right during ordinary inspiration; the respiration catching, and air did not appear to enter the left lung; the respiratory murmur on left side absent, and quite dull on percussion, both before and behind; the abdomen distended and tympanitic. Leeches were applied, and calomel and antimony administered.

18th.—The symptoms in general appeared but little relieved, and the following physical signs were

present, viz., dulness on percussion, on left side anteriorly, also in axilla and back part of thorax; respiration bronchial over root of lung anteriorly; posterior part of base very much obstructed with sibilous rhonchus; base of right lung also sibilous, but this side resonant throughout. Mercurial inunction was now tried, and diuretics given internally.

23rd.—The pulse was very feeble, almost imperceptible; right intercostal and abdominal muscles moved only during respiration; breathing catching, worse on being moved; a very slight sibilous râle heard here and there over left side of chest. Blister, with Dover's powder at bed time.

25th.—Features more sunk, extremities getting cool, took a little brandy with advantage.

28th.—The whole left side of chest seems more rounded and the ribs more elevated, but there is no difference by measurement between either side just above the nipple.

December 2nd.—Left side more rounded, still intercostal spaces obliterated; no impulse on coughing; heart pulsates between apex of sternum and right false ribs; left side now measures about three quarters of an inch more than right, just over the nipple; pulse very feeble; appetite good; much emaciation. Paracentesis proposed but not acceded to.

6th.—Much the same, countenance more cheerful; pulse imperceptible, takes plenty of food, sleeps well, physical signs the same; heart pulsating below right false ribs; passes a little more urine than usual; is taking diuretics with Dover's powder at bed time. To day nearly three ounces of thick yellow inodorous pus were drawn off by means of a hydrocele trocar, introduced between the sixth and seventh ribs on the left side. Afterwards the breathing was so much relieved that he was able to lie on the opposite side without much inconvenience; the heart returned partially to its natural position, pulsating now under the apex of the sternum.

11th.—The heart had again returned to its abnormal position under the right false ribs, no discharge had taken place from the wound, which had healed. The child gradually sunk and died on the 16th.

On examining the body next day, upwards of eight ounces of pus, mixed with serum and thick solid matter, was found in the left pleura, the surface of which was uneven and ulcerated; towards the mediastinum, pericardium, and diaphragm, it was much thickened. The lung was compressed quite flat against the mediastinum, so as to obliterate all trace of pulmonary texture, it seemed to be bound closely and firmly by a thick white deposit. The right lung was of large size, the base hepatised, the apex crepitating and free of any tubercular deposit; there was about half an ounce of serum in right pleural sac. The heart lay on the right side. The pericardium much thickened by coatings of lymph externally and internally, it contained about half an ounce of yellow serum, there were some long bands about the middle and base, which were easily broken down. Heart seemed larger than natural.

CASE II.—PLEURITIS: PARACENTESIS: RECOVERY.

N. ———, aged ten months, living about a mile from Dudley; a stout child, in robust health till three weeks preceding the 8th of January last; it was then taken with feverish symptoms, and pain coming on

in paroxysms, with starting and screaming during sleep; there was no cough, but the epigastrium was fuller than natural. Medicines were given, and leeches applied, but without benefit. In a week afterwards the right side of the chest was dull on percussion, and about the 1st of January signs of effusion presented themselves. Blisters were applied, and diuretics administered, first of squill, acetate of potass, and digitalis, and small doses of blue pill; then of taraxacum and nitric acid, with but little effect on the urinary secretion, and none on the pleuritic effusion.

January 7th.—The breathing had become more permanently embarrassed, and the dyspnoea very great, the countenance congested and anxious, and a number of small brown or purple papulæ appeared on the lower extremities, and on the body, which was not much emaciated. There was now perfect dulness over the right side of the chest, and it measured three quarters of an inch more than the opposite; there was distinct enlargement below the right clavicle, and dulness was considerably extended below the natural position of the liver; the heart beat in its natural position, but the sounds were a little obscured; there was no fulness of the intercostal spaces, but the whole side seemed distended to its utmost; respiration was bronchial over the most part of it, and no vesicular murmur was heard. An exploring needle was introduced, pus escaped, and on introducing a small sized trocar, about a pint of pus was let off. Immediately afterwards vesicular respiration returned to the right nipple, and nearly to the base of the lung behind; the pulse became fuller directly. Next morning, after passing a somewhat restless night, the pulse was 180, dulness still existed at the base of the lung, and the respiration there was tubular. The child took its food well. On the second day after the operation "half a teacupful" of matter escaped spontaneously from the wound in the chest.

13th.—The pulse is 116 in a minute, and rather full; the chest gives a more natural sound on percussion, less resonant in the fore-part, and dulness not so intense behind; the respiratory murmur is much more distinct and vesicular all over the right side of the chest than at last examination; the parietes are more active during natural respiration; the cough at times is troublesome; and there is much restlessness, with some diarrhoea. Chalk mixture, with Dover's powder, was given at bed-time.

16th.—Wound discharged yesterday about half a pint more pus, and there is now spontaneous oozing; general state much the same.

20th.—Pulse 120; breathing quiet; cough troublesome; wound discharging. Poultice applied.

26th.—General state improved; wound continues to discharge freely; appetite returned; diarrhoea lessened; respiration more natural all over the right side, it has a bronchial character, but less so than it had. Percussion gives a wooden tympanitic sound.

February 19th.—The patient had a slight attack of bronchitis about a fortnight ago, from which it is quite recovered; the wound in the side has completely dried up; general health continues to improve rapidly.

May 1st.—There is now scarcely any physical difference between the sides of the chest, and the child is in as robust health as before the illness.

CASE OF CYNANCHE TONSILLARIS:

SUDDEN DEATH BY ASPHYXIA: PASSAGE OF THE PURULENT MATTER OF AN ABSCESS INTO THE LARYNX AND TRACHEA.

By WILLIAM ENGLAND, M.D., Wisbeach.

Mrs. B., aged 30, very handsome, of fair complexion, the mother of four healthy children, had a tardy convalescence after accouchement in November, 1841. Although she had no cough she gained flesh but slowly, and in consultation with Mr. Burman, early in December, I was led to infer the existence of tubercular cachexia, and from stethoscopic examination, the probability of tubercular deposit in the right lung. After this threatened attack of phthisis Mrs. B. regained her usual health, with the exception of being thinner than prior to this accouchement. Since then she has had two children.

Sunday, August 12, 1849.—Mrs. B. got wet when walking with her husband. On the following day she suffered from sore throat, but having been subject to repeated attacks of quinsy for many years, and having always recovered from them without their being attended with dangerous symptoms, she refused having any medical assistance until a week after the commencement of the present attack.

Sunday, 19th, 2 P.M.—She was first seen by Mr. Burman, who found the case one of ordinary cynanche tonsillaris, and directed the frequent application of warm poultices to the external fauces, constant inhalation of the steam of warm vinegar and water, a gargle of infusion of roses with tincture of myrrh, and to take at bed-time a draught, with muriate of morphia a quarter of a grain; tartarized antimony, half a grain. The same evening the difficulty of deglutition was relieved.

Monday, 20th, 2 P.M.—Mrs. B. was much better, and the difficulty of deglutition continued to diminish. Repeat the draught at bed-time, and other treatment. Mr. Burman did not consider it necessary to repeat his visit in the evening. Before going to bed she ate some bread and milk for supper, and afterwards drank some wine whey. Her husband keeping one of the principal inns, Mrs. B. was as usual in the bar in the course of the evening.

Quarter to 11 P.M.—She went to bed, and was soon followed by her husband, who had wished her good night, and heard her response in a voice of her ordinary tone and strength, when she complained of faintness, from which she was relieved by her smelling bottle. In a few moments afterwards her husband was alarmed by a rattling sound in her throat, followed by instant suffocation. In less than a quarter of an hour Mr. Burman was at the bed-side, and found her sinking from asphyxia. On my arrival, in a minute or two, Mrs. B. was dead.

Tuesday, 21st.—Permission was given to inspect the larynx and trachea. After laying bare the whole surface of the vocal tube and trachea by a clean dissection of the external muscles, a longitudinal incision was made at once throughout its whole length from below upwards. As soon as the scalpel entered the trachea, a considerable quantity of sero-purulent

matter gushed out, and as the incision was continued through the cartilages of the larynx, the whole of the tube, and particularly the sacculi laryngis, were found distended with flakes of pus floating in sero-sanious matter. The pus was the purulent matter of asthenic abscess, and *not fetid*. The mucous membrane sponged clean, presented a pale, uncongested, unphlegmasioid condition. The whole tube was in a state of integrity, without any perforation. The epiglottal aperture was abnormally patent. Both tonsils were considerably enlarged, the right in a much greater degree than the left, which, by Mr. Burman's report, had much diminished in size since his first visit. Neither tonsils had suppurated.

REMARKS.—Nothing in medical statistics is better known than the extremely rare fatality of cynanche tonsillaris (quinsy.) Dr. Watson, in his excellent lectures, mentions only one unfavourable termination from his own personal knowledge, and which I shall presently allude to.

Dr. Gregory told the late Dr. Duncan, jun., that among many hundred cases he met with only one that was fatal. Willan and Bateman, in their elaborate reports of the "Diseases of London," do not speak of any severe case of this form of angina. The only case that I can find recorded that bears any analogy to the case of Mrs. B., is one published by Dr. Watson, in the third volume of the *London Medical Gazette*; but in that case the asphyxiating cause was coagulated blood from a branch of the lingual artery being perforated by an abscess of the pharynx opening into the fauces below the left tonsil, on a level with the epiglottis. In the case of Mrs. B. also, the tonsils had not suppurated, and I am inclined to think the abscess was pharyngeal, seated likewise under the left tonsil. That we were obliged to limit the *post-mortem* inspection is much to be regretted.

Wisbeach, August 24, 1849.

CLINICAL ILLUSTRATIONS.

MENORRHAGIA, UTERINE CONGESTION, &c.

By EDWARD BALLARD, M.D., East Retford,

Late Senior Physician to the St. Pancras Royal General Dispensary, and Medical Tutor in University College, London.

Menorrhagia, pain, &c.; difficult and painful micturition; enlargement of entire uterus; treatment by recumbency and bromide of potassium: recovery.

E. C., aged 28 years, married for five years to a footman who rarely visits her, by occupation a needlewoman, applied at the dispensary on February 17th, 1846. She bore a child about nine months after her marriage, and nursed him eighteen months, by which she became very much debilitated. Immediately on weaning him she again became pregnant, and when about three months gone, after an accidental tripping, she miscarried, losing a large quantity of blood, and

becoming still more weakened. She kept her bed for the greater part of three months, suffering pain over the left hip and groin, and having an offensive red discharge. As she improved she went into the country for twelve months, during which time she was not visited by her husband, and the catamenial discharge occurred regularly, and in proper quantity. She returned home last June, and remained well till September, except that the catamenia did not appear during the months of July and August. On the 19th of September, however, she was poorly, and on the 22nd was suddenly seized with fainting, which was soon followed by cramp-like pains across the epigastrium, with tenderness. There was also severe pain across the loins. Bran poultices were applied, and she took some medicine. In three or four days afterwards very severe pain occurred over the right iliac crest, extending to the groin. In about a fortnight all the pains abated, and just as she was getting about again she was similarly attacked the second time with fainting, &c., the pain running down the outside of the right thigh as far as the knee, and being much more severe than formerly. She was relieved by the application of a few leeches to the right side of the pubes, and a blister above the crest of the ilium.

From the 19th of September to the present time she has not been free for a day from a sanguineous discharge, which, though thus constant, has been much greater at each catamenial period. For the last three months, moreover, she has suffered cutting pains across the hypogastrium, after passing her urine, or else a difficulty in the act, with frequency. About a fortnight ago she was suddenly seized with pain from over the right hip to the groin, which, coming at first in paroxysms, is now continual. During the same period she has been unable to lie on either side, since lying on the left side induces a sense of dragging from above the right hip, and from the navel when upon the right. The catamenial discharge has been very profuse for the last eight days, and accompanied by an abundance of clots; occasionally it appears to occur in gushes. Countenance pallid; frontal headache relieved by lying down; bowels regular. On pressing the lower part of the abdomen towards the inlet of the pelvis, a distinct resistance is met with. Further examination was postponed. She was directed to lie outside the bed continually, with the hips slightly raised.

The catamenial flow lessened shortly after retaining the posture directed, and on the 20th she stated that it had not been so trifling since her illness, and that the pains had also greatly diminished. On the 22nd it had completely disappeared, but not the pain and tenderness.

On the 25th the discharge not having returned, I made a physical examination. A hard tumour was very readily felt rising for about three inches above the pubes, in the middle line, rounded in outline, as if it were the fundus of the uterus. On vaginal examination the cervix was readily arrived at by the finger; it was enlarged and hard. The os uteri admitted the top of the finger, but had preserved its natural form. A rounded tumour was perceived occupying the upper

part of the pelvis, and plainly consisting of the enlarged body of the uterus. It was the first thing that the fingers touched on being introduced into the vagina, was very hard, and could be moved by the finger within the vagina and the hand upon the tumour externally. She was directed to maintain as much as possible the recumbent posture, and to take three grains of bromide of potassium in infusion of calumba three times a day.

She continued this treatment, with a slight intermission on account of some dyspeptic symptoms, which had arisen, during nearly the whole time she was a patient at the dispensary. The pain soon began to lessen, and by the time the next catamenial period came round, which was on the 24th of March, it had completely disappeared. The discharge lasted a week, (the customary time for her,) was not profuse, and only a little clotted. On April 20th the catamenia returned, the flow again was natural, and on the 25th she went for a short time into the country, where, having given up the recumbency—she was out a great part of the day—the result of which was to induce a slight return of pain, and slight leucorrhœa. On the 9th of May, having again been kept lying for four days, she was better in these respects, and experienced no difficulty or pain in passing her urine. I again made a physical examination. The fundus, as felt above the pubes, presented a smaller tumour, giving a less striking idea of hardness, and lay more towards the back part of the pelvis. The vaginal examination exhibited the body of the womb smaller, but still forming a distinct tumour, more moveable. From this time she continued to gain strength, and on the 18th of June, when she was discharged, the body of the uterus was of little more than the ordinary size, and with the cervix sufficiently soft. The os remained still large and open. There had been no pain, and the catamenia had just occurred, perfectly natural in every respect.

REMARKS.

I have narrated this case, not because it presents anything of singularity in its pathology, or of novelty in its management, but because it enables me to make a few observations on a common form of a very common disease.

Whenever a case of menorrhagia presents itself for treatment, the inquiry naturally suggests itself, whether it is dependent on causes operating through the system generally, or whether it is to be attributed to some local affection of the generative organs. If on careful investigation we discover nothing in the general state of the constitution to account for it, the next point is to determine whether the uterus itself is in fault, and this should be done even where a sufficient cause is discovered in the state of the vascular system as to fulness, tonicity, &c. Having settled upon the uterus as the seat of disease, the question arises whether it is of a temporary nature, such as a derangement in its vascular supply, or whether it is more permanent in its duration, as would be the case with cancer, fibrous tumour, polypus, &c. This process, then, had to be

gone through in the *diagnosis* of the case I have been relating. The patient was plainly debilitated. Here was a cause which might operate forcibly in the production of the symptoms we are considering; but on the first day she was visited, I detected a tumour extending some way above the level of the pubes, which led me to believe that there was in addition some local disorder, an opinion which was confirmed by the pains she suffered over the ilia and in the groins, the dragging sensations when lying on her side, and the disturbance of the functions of the bladder. Further evidence was afforded, on the cessation of the menorrhagic flow, by vaginal examination. The entire organ was then found to be swollen, and it remained to determine the nature of the enlargement. Was it due to the development of fibrous tumours? If these were *subserous*, they could not have been expected to produce menorrhagia, besides which the swelling would have been lobulated, not regular and uniform, as in the case before us. *Submucous* tumours, if numerous and of large size, are also disposed to produce elevations on the exterior of the organ, (see Case II.) which were not present here, the enlargement being general and uniform. The menorrhagia which leads to the suspicion of these growths, too, is in the form of a sudden and profuse flooding, occurring repeatedly after intervals of complete cessation, and not necessarily at the ordinary catamenial periods. In this case it was a mere increase in the natural discharge, with a protraction through the interval. It was just what might have been expected to occur when the organ was loaded with blood, which the regular discharge, though augmented, was incapable of relieving. Was it cancer with hypertrophy, as in Case II.? The objections adduced to the idea of fibrous tumour hold good here also, besides which the patient was at a rather early age for that disease; the cervix was unaffected by any cancerous deposit, as is usually the case if the organ is affected with it at all; and when it affects the body only, it is mostly the posterior wall, of which there was no evidence. Pregnancy was entirely out of the question, the only point in its favour being the enlargement of the body of the womb, and the rounded anterior wall, as felt from the vagina, every other symptom and sign being opposed to it. It only remained for me to consider whether the womb were merely the seat of congestion, or whether there was any inflammatory action conjoined with it. The duration of the congestion rendered it not improbable, and although pathologically doubtful, yet considering that congestion of an organ rarely lasts long without an increased deposition of nutritive plasma, it was practically proper to lean to the affirmative, at any rate to permit this bias to guide the treatment.

The cause of all the ailments the patient suffered from was the protracted lactation which followed the birth of her first child. This disposed the womb to suffer from gravitative congestion, without which the simple act of tripping in her walk would have been insufficient to occasion miscarriage. This was the time when she first began to complain of pain over the hip, and presented a sanguineous discharge. The illness, which had lasted for five months when she came under

my care, was due no doubt to gravitative causes, co-operating perhaps with a general reduction of the tone of the system on returning to London and her customary occupation. The recurrence of pain in the month of May, after it had disappeared under treatment, was also plainly the effect of giving up the recumbent posture she had been maintaining previously, and over exertion.

Believing, then, that I had to do with a menorrhagia, dependent on long standing congestion of the uterus, which was probably accompanied by an increased deposition of plasma, and that all was kept up by the influence which at first occasioned the disorder, namely, gravitation in a debilitated subject, I abstained from any local abstraction of blood, relying upon the fulfilment of the following indications:—1st, the removal of the influence of gravitation; 2nd, the improvement of the patient's strength; and, 3rd, the promotion of absorption of any deposited plasma, which congestion or inflammation might have given rise to. With a view to the first, she was kept in the recumbent posture, with the hips elevated by a pillow; to fulfil the second, she was supplied with a tonic infusion, and a liberal diet; and for the third, bromide of potassium was administered—a remedy which has been believed especially applicable in cases of uterine disease. The good results which followed attested the correctness of my views. From the very day the patient assumed the recumbent posture, the menorrhagia lessened, and in five days, although of five months' continuance, it had entirely ceased. It took a longer time, however, for the enlarged vessels to assume their normal dimensions, and for the entire reduction of the bulk of the uterus to be accomplished; the latter object was not completely attained even when the woman was discharged from the Dispensary, although she had been taking the bromide for four months with but brief intermissions. Her strength, however, had much increased, she was free from all uneasiness, there was a great reduction in the size of the womb, and the catamenia were in every respect regular.

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF PROFESSOR SANDS COX, F.R.S., SENIOR SURGEON TO THE HOSPITAL.

Reported by Mr. PETER HINCKES BIRD, late Resident
Medical Officer.

CASE XXV.

ENCEPHALITIS FROM A BLOW ON THE HEAD.

Mary Brown, aged 30, single, but has one child; a proprietor of a house of ill fame; a stout fine woman, but of intemperate habits. Admitted under the care of Professor Sands Cox, on the 27th December, with two

lacerated wounds of the scalp, one over the right frontal eminence, and the other over the superior and posterior part of the left parietal bone. She is quite sensible. She states that a man struck her twice with a pair of tongs, which were broken by the force of the blow. There was no appearance of fracture. She complains of faintness, and of slight pain in the head. The wounds were brought together. She was placed on low diet, and active aperients ordered. Her health continued good, with the exception of slight headache. She was discharged at her own request on the 31st.

On the 2nd of January, 1847, at half past one o'clock, she was re-admitted into the hospital in a state of complete insensibility. It is stated by her friends that she went to bed in good health on the night previous, and was found insensible in the morning; that she had not taken any alcoholic drink since her discharge, and that no rigors were observed.

Present state.—She lies perfectly insensible; the whole of the muscles of the right side of the body are in a state of tonic contraction, and on pinching the leg, or tickling the sole of the foot, no movement follows; the mouth is slightly drawn towards the right side; the right pupil is slightly contracted, and the left dilated; both answer to the stimulus of light. She is very restless, moans, and is continually turning towards the right side; pulse 76, and weak; respirations fifty in the minute, laborious, but not accompanied by stertor; skin moist and warm; feet cold. R. Ol. Croton Tiglii, gtt. j.; Sacch. Alb., gr. x. M. Fiat pulvis omni secundâ horâ sumenda donec alvus bene responderit. Warmth to be applied to the extremities.

The wound on the scalp has an unhealthy appearance, and discharges a thin offensive matter, of a dirty yellow colour. To have a poultice applied to the wound.

5 P.M.—Breathing quicker, and more laborious; pulse 120; the tonic contraction of the muscles of the superior and inferior extremities of the right side was observed to have given way to paralysis; and the muscles of the left superior extremity were now observed to be in a state of tonic contraction. Sixteen leeches to be applied to the temples, and a blister to the back of the neck.

9 P.M.—Conjunctiva of both eyes injected; pulse 140; respirations ninety in the minute; bowels acted upon twice; the skin of the face is covered by profuse perspiration.

3rd. 10 A.M.—Breathing very laborious; expirations very marked in duration, and accompanied with mucous rattle; left hand continues in a state of tonic contraction. She died at half-past one p.m.

Secitio cadaveris.—On removing the epicranial aponeurosis, the bone beneath the wound was carefully examined, but no fissure or depression was detected. On opening the head, the superior surface of the dura mater beneath the injury, and that part of the longitudinal sinus adjoining it, presented a circumscribed elevation, of a deep red colour. The longitudinal sinus at this spot contained a few beds of lymph. The cerebral surface of the dura mater was observed to be healthy. The superior surface of the visceral layer of the arachnoid was smeared over with a small quantity of puriform secretion. A deposit of lymph and pus was found to exist in the meshes of the pia mater covering the superior, internal, and anterior, surface of each cerebral hemisphere. The same deposit was also

observed in the sulci between some of the convolutions. The cineritious matter of the anterior lobe of the left hemisphere was thought to be slightly softened. The membranes covering the rest of the cerebrum and cerebellum were healthy. The substance of the brain, with the exception of that portion previously mentioned, was perfectly healthy. *Thorax:* The heart was hypertrophied; the valves and orifices healthy; the lungs were perfectly healthy, with the exception of the bronchial mucous membrane, which was much congested. Abdominal viscera healthy.

REMARKS.—This is a case of much interest, as it was of great importance that a correct diagnosis should be made, inasmuch as it might have been, by a careless observer, mistaken for compression of the brain, from the pressure of pus between the dura mater and the bone; and the trephine would probably have been applied, with chagrin to the surgeon, and without any benefit to the patient. The blow upon the head, the apparent healthy state of the patient for a few days afterwards, and the subsequent coma, accorded so well with the history of cases to be met with in every surgical work, that before examining the patient carefully, it was concluded that she suffered under compression of the brain, caused by the presence of pus between the dura mater and bone; but on making a more accurate examination of all the symptoms, a just conclusion was arrived at. The whole of the muscles of the right side were in a state of tonic contraction, which depended upon inflammation of the arachnoid and pia mater, and consequent irritation of the left hemisphere of the brain; and if the history of the case be observed, it will be seen that the contraction afterwards gave way to paralysis, and that the muscles of the left side became contracted in the same manner as those of the right. The causes of these symptoms and their changes are very interesting.

The inflammation of the arachnoid and pia mater covering the left hemisphere of the brain proceeded to suppuration, and compression was the result, thereby causing the muscles of the right side, in a state of tonic contraction, to give way to paralysis; the irritation extending, affected the membranes covering the right hemisphere, and tonic contractions of the muscles of the left side immediately followed.

The diagnosis and symptoms are in accordance with the *post-mortem* appearances. On the left side we see sufficient pus to account for the paralysis of the muscles of the right side, and the less advanced state of the deposit on the right side accounts for the contraction of the muscles of the left, which, had the patient lived a little longer, would soon have given way to paralysis, in consequence of the formation of more pus, which would soon have acted as a compressor all over the brain.

POISONOUS EFFECTS OF ARSENICAL PIGMENTS.

Dr. Basedow, of Mersberg, has ascertained that Scheele's green, (arsenite of copper,) when employed in painting apartments, &c., may give rise to the evolution of arseniuretted hydrogen under the influence of moisture, and has traced as its results the production of rheumatic and neuralgic pains, marasmus, and diseases of the skin.—*Journal de Chimie Médicale.*

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, SEPTEMBER 5, 1849.

Nothing can more thoroughly demonstrate the necessity of an authorized inquiry into the nature of the prevailing epidemic, than the continuance of that state of uncertainty as to the best mode of treatment, which still prevails, wherever this formidable disease has made its appearance. It is, therefore, with feelings of pride and gratification that we direct the attention of our readers to the resolution passed at the recent anniversary meeting of the Association, requesting the Council "to take into their consideration whether it will not be desirable, as soon as the present epidemic visitation of cholera has passed away, to issue a series of questions to the members, similar to those issued after the close of the epidemic catarrh in 1837, requesting information respecting the origin, progress, and duration of the epidemic; its symptoms and treatment; the atmospheric phenomenon preceding and attending it; together with such other particulars as may be necessary for the elucidation of many questions of interest connected with its appearance." We are desirous by the Central Council to announce, that at their request, Mr. Hunt, of London, who so ably conducted the inquiry into the medicinal action of arsenic, published in the sixteenth volume of our *Transactions*, has consented to superintend the investigation, and they trust every member of this Association who may have had any cases of cholera under his care, will, so soon as the epidemic has passed away, communicate to that gentleman every information in his power.

But before we can entertain any rational hope of bringing this important investigation to a satisfactory issue, it will be necessary to recollect, that, not only is there much discrepancy of opinion as to the origin, contagious nature, and treatment of cholera, but that there is also considerable variation in its definition. Thus, cases of diarrhoea, of English cholera, and Asiatic or malignant cholera, are now, in some returns, included under one category, because it is believed, and perhaps correctly, that these three forms are but different degrees of the same disease, and that they originate in the same common cause; whilst in other reports the

Asiatic Cholera is considered a disease *sui generis*, which has no relation, even in its origin, to the numerous cases of diarrhoea and bilious cholera which constantly abound in England in the autumnal months. Hence some would in their return confine the term cholera to the Asiatic or malignant form of the disease, whilst others would embrace in this term every case of diarrhoea and bilious cholera which might come under their care during this terrible visitation. It is most evident, that on this account, the returns of the Registrar-General cannot possibly approach the truth, since the local registrars have no clear and uniform understanding as to the precise nature of the cases they have to include under the head of "Cholera." To avoid all such discrepancies in conducting the present inquiry, it is proposed that the term *cholera* shall be restricted to that so frequently fatal form of the disease in which there are vomiting, purging, cramps, and "rice-water" evacuations, and to that still more formidable state of collapse unaccompanied by these symptoms;—that the term *bilious cholera* shall apply to the disease formerly called cholera-morbus, in which there is both vomiting and purging of bile, with cramps; and that the term *diarrhoea* shall be applied to those cases in which there are simply frequent and numerous fluid alvine discharges without either vomiting or cramps.

Whether these diseases have any relation of cause and effect;—whether, in the present epidemic, they are all different degrees of the same disease, and dependent on the same causes; or whether the milder forms are premonitory of the severer, are questions of opinion which must remain at present undetermined.

The proposed inquiry mainly applies to the ravages of the *cholera*, but it would be highly interesting to decide whether this ever shows itself without the contemporaneous appearance of the milder forms. The questions about to be addressed to the members, through this Journal, will embrace this point among others of more practical importance. *Meanwhile it is most earnestly requested that each member having the charge of cholera cases will keep such clinical notes under the above heads, as shall enable him to make a satisfactory return.*

THE responsibility incurred by the accoucheur, in determining on the destruction of the child, in certain cases of deformity of the pelvis, is so

great, and the difficulty in coming to a satisfactory decision in consequence of the difference of opinion existing among the authorities in this branch of our art, is so overwhelming to the conscientious practitioner, that we rejoice to find Dr. Radford about to attempt the solution of the question through the medium of this Journal.

From the early inculcation by the teacher, of the principle—that to save the life of the mother it is justifiable to destroy the infant, the student at length becomes hardened to the performance of his dreadful task, and if it can with *certainly* be shown that the only chance of safety for the mother lies in the death of her offspring, no one perhaps, would hesitate to accede to such a doctrine; but we are afraid that craniotomy is too often performed without that *certainly*, which we hold to be the only conceivable excuse for the breach of the Divine Law, necessarily incurred in this operation. So many cases are reported, and we are ourselves cognizant of many others which have been industriously concealed, in which the subsequent delivery of a living child, has proved the incorrectness of the decision on the previous occasion, that we cannot hesitate to affirm, that in a moral point of view the importance of the question is greater than that of any subject in the whole range of our science. There is, we are happy to say, no other case, either in surgery or midwifery, in which life is inevitably taken away by the hand of the practitioner; for, though in some other operations the chance of recovery may be small, still the difference is great between the performance of our duty with the hope of a successful result, and that awful destruction of a vital organ, which occurs in the perforation of the head of a living child.

Feeling strongly as we do the importance of this subject of inquiry proposed by Dr. Radford, we would implore our brethren who may have been called upon in the course of their career, to grapple with this formidable difficulty, to let nothing prevent their furnishing him as he suggests, with the returns of their cases, and thus aid him in his philanthropic design of proving, by the evidence afforded by statistical details, that the Cæsarean section, which gives a chance of surviving to both mother and child, may almost invariably be substituted for the revolting operation of craniotomy.

Review.

On Gout; its History, Causes, and Cure. By WM. GAIRDNER, M.D. pp. 232. London: John Churchill, Princes Street, Soho.

With the exception of the Croonian Lectures published by Dr. Todd, whose views are considerably at variance with those of Dr. Gairdner, many years have elapsed since any monograph of importance has appeared on this subject, the value, therefore, of a new work on gout, written by an experienced and successful practitioner, will be speedily acknowledged by the profession. "Not any of the diseases to which man is liable," says the author, "is a cause of greater perplexity and disappointment than gout; yet this does not arise from the oft repeated reproach of its intractable nature. It may indeed be said, with truth, that it is more curable than many, and that it is certainly more amenable to relief than most diseases which fall under the cognizance of physicians. The regular attacks of gout cannot be said to give more embarrassment to a medical attendant than the assaults of any other malady, and inasmuch as they are, for the most part, quite exempt from danger, they give little solicitude for the event. But it is quite otherwise with its irregular forms." The obscurity of gout, and its changing and mysterious phenomena, when once it deviates from its typical form, are not only well described, but elucidated by many new facts, and these of a kind to make the reader think for himself, and enable him to detect the disease where it lurks in the system, disturbing its healthy functions, and complicating its disorders.

In connection with its obscurity, the frequent occurrence of the malady is thus alluded to:—"I shall be more readily excused for calling upon physicians to read another book, if the opinion I entertain of the great frequency of gout be correct. We are apt not to consider a man as gouty unless he has suffered under a regular fit of the disease. I believe the gouty diathesis is often most perfectly developed in individuals who never see its local manifestations, and I am convinced the strumous is not more frequent than the gouty habit."

Among the premonitory signs of gout, the earliest is a dull pain on the left side of the chest, with inability to lie on that side, together with fluttering or irregularity of the heart. Then follow signs of impeded cutaneous circulation. "The sweat and sebaceous exudation which bedew the armpits and interstices of the toes, disappear; and with the unnatural dryness, the patient is disturbed by heat and itching of those parts. Eruptions chiefly of the scaly kind appear on the skin. Pityriasis, psoriasis, and lepra are very common. Acne and eczema are often met with. But no cutaneous affection is more common than nettle-rash."

Hæmorrhagic complaints—piles, spitting and vomit-

ing of blood; anomalous nervous symptoms—hemiplegia, neuralgia of the eyeballs, ears, fauces, teeth, loins, infest those persons in whom the malady is struggling for a vent. But to profit by the author's experience on this most important and not yet fully-developed portion of the subject—the diagnosis of gout—it is necessary to peruse the whole history of the disease, which is sketched with masterly skill. In describing the paroxysm in recent cases, he says:—"On awaking, the limb is swollen, disfigured, and œdematous. The dark purple rash, in some rare cases, is deepened in tint, even to blackness, and does not disappear for many days, passing through the variety of tints, yellow, green, &c., which characterise a true ecchymosis." And again:—"The pulse is not hard or throbbing," (as in ordinary inflammation,) "but rather that form of dilated full pulse which characterises hæmorrhagic affections."

The disease sometimes appears in the shoulder, embarrassing the respiration; and in the nape of the neck, and occiput, in these instances causing the most exquisite torture; as well as in the fauces, stomach, and diaphragm.

Among the sequelæ of gout, the condition of the heart is dwelt on, the functional disturbance of which transcends anything which can be explained by the sympathy of neighbouring organs, even of the stomach. Patients have within the author's knowledge passed into a complete swoon during sleep; the pulse feeble, irregular, intermittent, denoting the condition of the circulation at this stage. Defective nourishment of the brain, and defective innervation, as shown in the failure of the faculties, and loss of muscular power, are the consequences. Hence, too, the weakened power of digestion; the hæmorrhages from the bowels and the womb; the hæmaturia; the apoplexy; the ascites and hydrothorax; in some of which sequelæ the disease often finds a fatal termination.

The subject is yet in its infancy, but there are cases quoted and microscopic analyses given in this work, which render it probable that the muscular fibres of the heart in these cases undergo degeneration; nor is it difficult, as the author says, "to comprehend that with this fatty degeneration of its ultimate structure, muscular contractility should be overcome."

The author recognises only one form of irregular gout—the atonic. It makes its greatest impression on the nervous system, and rarely manifests itself in its incipient stage, like the regular disease, by disorder of the circulation. The instances are numerous in which this form of the disease does not attain to a fit, but afflicts the patient during a long period under the mask of every form of nervous disorder. The metastatic is only a variety of the atonic, and more frequently attacks the head than any other part, often as it is met with in the great viscera of the body. It here manifests itself in a kind of stupor, in which hearing and sight remain, but consciousness is lost of person, circum-

stance, place, and time. But our space requires that we should pass abruptly from this interesting portion of the subject to other matters.

The author, borne out by efficient argument, repudiates the notion of a *materies morbi* in gout. The dogma has been set forth of old, doubted, revived, and under the shelter of a lithic acid diathesis, almost re-established in recent times. But a diathesis, argues Dr. Gairdner, is a condition of the constitution, not a simple affection of certain fluids of the body. Moreover, were the gouty a lithic diathesis, the many diseases in which the lithates appear in the urine, would have claim to the gouty character; besides that uric acid as a cause of gout, should be never absent in the circulating fluids. Meantime, in cases of true gout there is sometimes no evidence of excess of urates in the urine; and cases are not rare in which deposits of earthy phosphates, with or without urates, are met with. Dr. Garrod has found uric acid in the blood; that it is a constituent of healthy blood is more than probable. If the shock of an attack of gout causes the kidneys to fail in their function of separating urea and urates from the blood, so that these substances require to be eliminated through other channels, it is not the case in gout alone; it is even more remarkable in hysteria.

An important chapter in this work is that on urea and uric acid. Here we have the chemical phenomena of gout re-considered on the basis of fresh experiments, and the results are as important as new. Few men have the opportunities which high practice affords of studying gout, and fewer the abilities to subject its chemical products to a series of well-conceived experiments. In the chemical chapter of his work, Dr. Gairdner has proved himself to be as good a chemical philosopher as he is physician.

The author had a strong conviction that in the altered relation of urea and uric acid to each other, would be found the explanation of many morbid phenomena. But this relation consists—not in uric acid being, as Wöhler and Liebig conceive, the parent of urea; on the contrary, in certain morbid states of the system the nascent urea becomes uric acid during the assimilation of food. In the case of a gentleman suffering under gouty symptoms, the urine was loaded with lithates, and on analysis, yielded in 1000 parts 25 parts of urea. In twenty-four hours after relief to the symptoms, the urine gave a feeble acid reaction, and the uric acid sediment had disappeared even after cooling. The proportion of urea, meantime, had risen from 25 to 29 in 1000 parts. In another case, given at length, the ratio of uric acid to urea was 1 to 18.6 while the attack was pending; and 1 to 28 towards the termination of the fit.

Guided by new and important views, the author instituted a comparison of the urine secreted during sleep with that passed in the day. In the case of one

patient, subject to, but not suffering from gout, the ratio of uric acid to urea was 1 to 25 in the morning; 1 to 45 in the afternoon. This and similar results, which bear upon the amount of respiration, and degree of oxygenation of the blood, which latter is retarded during sleep, as well as in gout, tend to confirm the author's view that urea and uric acid, which are constant and healthy ingredients of the blood, take their origin in the lungs during the process of respiration, and bear a certain ratio to each other in dependence on that process.

Pursuing the pathological argument, the author repudiates the doctrine of inflammation in gout, and argues with great success on the hæmorrhagic character of the local affection, and the atonic state of the nervous system in the disease, and the plethoric condition of the vessels. The subject of diet in infancy, as a preventive measure for those who inherit gout, is treated with much practical ability.

As respects treatment, among the numerous suggestions of sterling value, that of small blood-lettings, and the conditions under which they are warranted, stands prominently forward as opposed to the modern practice in this complaint. The management of the bowels, without having recourse to strong measures; the results derivable from diet and exercise; and, finally, the management of metastatic gout, are matters which occupy nearly half the pages of this strictly practical volume, and cannot be perused without advantage, even by the best informed practitioner. Indeed those who desire to profit by the revolution that a few years has worked on men's ideas, and who derive pleasure from the conviction that medicine is every day assuming more and more the form of a science, and the position of a truly great and useful art, will thank Dr. Gairdner for having shared with them the stores of his experience and knowledge on the important disease of which his work treats.

POWERS AND RESPONSIBILITIES OF THE ASSOCIATION.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,—No member of our Association can have read the Editorial article in the last number of the Journal, (Aug. 22,) without a feeling of conscious pride in being a member. The article is, in fact, but an eloquent echo of the sentiments which pervaded the meeting at Worcester. Long may every member have abundant cause of congratulation. But much as has been done by the Society to advance the cause of medical science, as well as to shed a moral lustre on the profession, I cannot but think that there remains very much more to be done. The harvest is great, but the labourers, when compared with our entire numbers, have as yet been few. It is true that but

few of us have time and inclination to *write*; nor would the pages of the Journal suffice for our contributions if we had. But the method of eliciting information from each member on some practical subject, has placed within the reach of all an opportunity of promoting the cause of science by the sacrifice of a small portion of time and attention, which opportunity appears to me to involve a moral and professional responsibility which should not thoughtlessly be evaded.

The inquiries which have been hitherto set on foot have been but feebly responded to. The mass of the members do not seem aware of the real value of their contributions. If all who have had *no* experience in the subject of immediate inquiry, would only take the trouble to make the return "*nil*," they would, as a body, furnish negative evidence which might prove of great relative value.

There are several subjects of inquiry at present before the Association, viz.,—

The Efficacy of Cod-Liver Oil in Phthisis. By Dr. Ranking.

The Statistics of Poisoning by Arsenic. By Dr. Sibson, Dr. Tunstall, and Mr. Fuge.

The Provincial History of the present Visitation of the Cholera; and

The Treatment of Cancer in its Early Stages by Arsenic. (See *Transactions*, Vol. xvi., p. 417.)

On each of the subjects of inquiry, and the method of conducting it, I beg to make a few observations.

Of all the remedies hitherto proposed for arresting the progress of consumption, nothing has ever so completely absorbed the attention of the profession as cod-liver oil. Of its absolute value, however, we have yet almost every thing to learn. If from some unknown cause it should be found, in private hands, repeatedly to fail, or to do mischief, it will be liable, like many other rejected remedies, to be cast aside without a fair trial, just as arsenic was treated half a century ago. The Association, however, has the power of rescuing it from this dishonour. The inquiry is in able hands. Let no member neglect to record his experience, whether large or small, and to forward it *promptly* to Dr. Ranking. The profession has an eye on this inquiry, and expects every man to do his duty. And I may be allowed to add, that if those members who undertake the management of these most laborious inquiries* are not duly encouraged—if their zeal be allowed to grow cold until it degenerates into indifference or disgust, the self-gratulations of the Association will hardly save it from public disgrace. The Provincial Association is the only medical society in England which can conduct such inquiries on a large scale, and at the same time extend them to every county. Our powers are prodigious—our personal responsibilities proportionally heavy.

The inquiry as to the statistics and other circum-

* It would have the appearance of marked neglect were I to allow these observations to be printed without alluding to the industry, zeal, and success with which Mr. Crompton has completed his important inquiry on "*Burns and Scalds*." His report will speak for itself, and will, if I mistake not, elaborate a new and important principle in surgery.

stances of importance connected with poisoning by arsenic, accidentally or designedly, with a view to a legal restriction of its sale, is also in most able and zealous hands. Dr. Tunstall has shown, in the article on the subject in the last number of the Journal, not only that his zeal in the cause of humanity is highly commendable, but that his views of the method to be pursued to accomplish the object, are neither crude nor ill-digested. He is familiar with the difficulties in the way. He has well considered the indifference of the Legislature to medical matters, as well as the tricks and shuffles of interested and opposing parties. And these difficulties can only be met by facts, and by intelligent legislation founded on these facts. Dr. Tunstall earnestly craves the assistance of every member of the Association in supplying him with facts, he having been requested by his colleagues of the "Secret Poisoning Committee," with the sanction of the President, to conduct this inquiry—an inquiry which cannot be disregarded without betraying a sad indifference to human life. Let every case of poisoning by arsenic in the provinces, with all the circumstances attending the purchase, be obtained from coroners and from all well-authenticated sources, by every member who can gain access to them, and forwarded to Dr. Tunstall; and the country, if not the Legislature, will be astonished that it should so long have viewed the subject with apathy.

The inquiry concerning the *present visitation of the cholera*, (the particulars of which will shortly be proposed in the Journal,) will be thought by many members to be useless. There are in the profession many thinking men who, in contemplating the ravages of this mysterious and fatal disease, have given up all hope of ever arriving at any knowledge of its nature and origin, as well as of its treatment and cure. Their misgivings may prove to be well founded, but it does not follow that the inquiry may not be very useful. It may elicit proofs of the value of certain preventive measures, or suggestions towards improved drainage and ventilation, which may ultimately save many lives. It is, therefore, to be hoped that this investigation will receive a helping hand from every member of the Association, not only from those who have treated the cholera, but from the practitioners of healthy districts where the disease has not appeared; for the fact of its non-appearance in a given district, while it is raging all around, is more likely to lead to a discovery of its cause than its appearance. But the fact, to be useful, must be *known*; and to be *known*, it must be *reported*.

The question concerning the use of arsenic in the early stages of cancer or other adventitious growth, I propose to pursue, not by direct and special inquiries, but by the method suggested in the last volume of the *Transactions*, (p. 417.) In the earnest hope that my brethren and fellow-members will kindly lend their assistance in pursuing special experiments with this important mineral, as they have honored me with their attention in reporting generally on its action, I reiterate the proposition:—"Let such a disease as cancer, or any adventitious growth in its earlier stages, be treated with arsenic internally, on the conditions of administration which this memoir demonstrates as most favourable for

its action. Let the treatment be persisted in, nothing forbidding, for three months. Let the case be then left to nature for three months, and the arsenic resumed for a like period, and again let its use be remitted, watching the case closely, and avoiding, as far as possible, all disturbing influences. Each case *must* tell an instructive tale. Let the details be noted in a case-book, always in the presence of the patient, lest the memory prove treacherous. Let every member of the Association, and every professional reader, be persuaded to pursue this plan for twelve months, having the notes ready for delivery whenever the Association shall ask for them, and in less than two years from this time the profession will have gained a valuable increment of practical knowledge, whilst the patients so treated, I will undertake to say, will have no cause to complain that they have been tampered with, or that they would have fared better under the routine practice of the day."

Thus we have four important subjects brought before us for investigation. Delays are dangerous; and if it is thought that attention can be given to these matters at any time, it is much to be feared that we shall do but little. Let us all begin to day. Let the members who have never kept a case-book, begin to keep one to day. Perhaps no medical man ever became distinguished who did not record his cases. A well-arranged case-book is a treasure to its owner, which increases in value every year. There is no book in his library on which he sets half so much value; and has it not proved the foundation of many a man's fortune? The time consumed in keeping these little histories will never be missed, and the mere act of writing them assists us in our observations; it gives truth, and accuracy, and comprehensiveness to our thoughts, and awakens attention to important points which might otherwise be overlooked. All this has been insisted on a hundred times, but I fear there are yet members of the Association who have not fully acted upon it.

I am, Sir, yours very respectfully,

THOMAS HUNT.

Bedford Square, Aug. 28, 1849.

ON CRANIOTOMY.

TO THE MEMBERS OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

Gentlemen,—It is within the power of our Association to accumulate such a number of facts upon different obstetric subjects as would most assuredly tend to settle some of those points of practice which are now in dispute. Being anxious to bring my views on the subject of craniotomy, &c., more prominently before the profession, I take this opportunity to respectfully request, from every member, a return of the number of craniotomy operations he has performed, with the account of the maternal mortality.

Although it is necessary to have every communication authenticated by the name of the operator, it need not be mentioned in my statistical statement.

I have the honour to remain,

Yours most respectfully,

THOMAS RADFORD.

Manchester, August 22, 1849.

Proceedings of Societies.

SOUTH-EASTERN BRANCH MEETING OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

*Held at the Town Hall, Brighton, on Wednesday,
June 27th, 1849.**

The following resolutions were then unanimously adopted:—

1. That it appears to this meeting that Guildford would be a convenient place for the general meeting in 1850, and that the following gentlemen be requested to accept the offices of this Branch, at the Guildford meeting, and for the ensuing year, as follows:—Mr. Stedman, President; Mr. Newnham and Dr. Bacon, Vice-Presidents; Mr. Napper, of Guildford, Messrs. Chaldecott and Hart, of Dorking, Dr. Lane, of Ewell, Mr. Stillwell, of Epsom, Mr. Wallace, of Carshalton, Mr. Westall, of Croydon, Mr. Gall, of Ripley, Mr. Davies, of York Town, Bagshot, Mr. Sloman, of Farnham, and Mr. Martin, of Pulborough, be considered as the committee of management.

2. That the profession generally is deeply interested in the improvement of the system of Poor-Law medical relief; and that the Council of the Provincial Association be urgently requested to continue its exertions for the attainment of an object so necessary to the honour, as well as for the interests, of the profession.

3. That on many considerations, the annual general meeting of the entire Provincial Medical and Surgical Association at Brighton the next year, would be, in the estimation of all present, a very agreeable and desirable event; and that an invitation from this meeting, to that effect, be presented to the Council of the Association at the ensuing meeting at Worcester.

The Secretary then read a communication he had received from Mr. Thompson, of Westerham, who was appointed one of a sub-committee at the Tunbridge Wells meeting, for the purpose of investigating the subject of medical clubs, and their bearing on the interests of the profession.

Owing to the lamented death of one of the Committee, and the engagements of the other, he had been, in a great measure, deprived of their conjoined efforts.

Mr. Thompson was, however, fully persuaded, that the information and experience obtained in one locality would apply to other districts, and he found that these clubs, either as family penny clubs, or as connected with friendly societies, were not confined to the lower classes; the opulent tradesmen and farmers being members of these clubs, and availing themselves of their privilege as respects medical attendance, under the disguise as it were of a pauper pretension so unbecoming and unjust. Not only in this way did the profession suffer; Boards of Guardians held up these clubs as examples to their medical officers; and when complaints were made of the inadequacy of Poor-Law salaries, the surgeons were told, "You have no right to complain, seeing that our pay is better than that of medical clubs, which you eagerly take."

This argument Mr. Thompson feared was incontrovertible, and one that would militate very much against Poor-Law Medical Reform.

His next attention was directed to the best mode of remedying the evil of these clubs; and with this view, a meeting was called of such gentlemen in the district as were in the habit of attending medical clubs.

The result of the meeting was, that while all admitted the impositions practised in these clubs, none were willing to relinquish them, for fear their medical neighbours should take them, or that strangers would be brought in for that purpose.

Such being the result of his inquiries and experience, during the past year, he was led to the painful conclusion that nothing could be done to remedy this evil, which was chiefly attributable to the competition of an over stocked profession; and the only hope of ameliorating their state, as respects this particular subject, must arise from the cultivation of mutual attachment, respect, and forbearance, as regards each other's interests, and confiding trusts.

Mr. Trustram did not despair of a remedy for this evil, if one gentleman in each district would take up the subject and endeavour to induce all the medical men to pledge themselves, in writing, not to engage with any medical club which was not confined exclusively to the working classes, servants and labourers. Many in good circumstances joined these societies, whose pride prevented their receiving the weekly sick allowance from the club, but who did not scruple to receive the medical attendance, and medicines, of the practitioner engaged to render his services to the members of the club.

Dr. King suggested that this Society should obtain statistical information relative to these clubs—the number of members in each society—the amounts paid—the different trades, businesses, or rank in society of the members, and other details.

Several gentlemen mentioned instances within their knowledge of the abuse of the privilege for medical attendance, and the excessively inadequate remuneration awarded to medical men for their services in these cases.

Mr. Trustram suggested the formation of a sub-committee from the general committee of management of this Society, to investigate the subject, and report to the next annual meeting. The Secretary volunteered his services in the prosecuting this inquiry; and these suggestions were severally adopted.

Mr. Newnham, of Farnham, then favoured the meeting with a statement respecting the Benevolent Fund of the Association, replete with information, which was highly interesting to all present, and calculated, not only to induce gentlemen to contribute to the fund so kindly and energetically advocated by Mr. Newnham, but also as affording proof that members generally were not yet sufficiently awakened to the force of the call upon their beneficence, from insufficient information as to the amount of misery and privation which actually prevailed among the families of deceased members of the profession, and by those who were disabled by their own loss of health, and inability to exercise their vocation.

The members of the Association had however, of late, responded more liberally than heretofore; and

* Continued from page 412.

nearly five hundred pounds had been applied to the relief of about forty cases of wretchedness and want, within the last year.

In the administration of the funds, the greatest care and circumspection had been used in ascertaining the facts of each case. Relief has been afforded to the families of regularly educated practitioners only, to those who have been always prudent and careful in their expenditure, and never to those whose misfortunes have been induced by improvidence and extravagance.

Mr. Newnham's impressive, as well as benign, address, was listened to with profound attention, and no doubt had its due effect on the minds of all present.

Dr. Sibson favoured the meeting with the following communication, illustrated by diagrams, as conveying the results of his investigations into the movements of the respiratory organs in disease:—

In health, the inspiratory movement of the walls of the chest, during tranquil breathing, is only from two to six hundredths of an inch; while that of the abdomen is about three-tenths of an inch.

During a deep inspiration, the expansive motion of the walls of the chest is, in front, about one inch; and at the side, about two-thirds of an inch; and that of the abdomen is about one inch.

The expansion of the two sides of the chest is nearly equal; the left side does not however expand quite so much as the right side, over the lower two-thirds of the chest, owing to the position of the heart.

In those cases in which there is great obstruction to the entrance of air, during inspiration, through the outer air passages, as in cases of extreme narrowing of the larynx or trachea, the walls of the chest, to a greater or less extent in proportion to the obstruction, instead of advancing during inspiration, actually fall backwards. The cause of this remarkable phenomenon is evident, the diaphragm acts with great power and lengthens the lung, and as air can only rush into the lengthened lung through the larynx, with great difficulty, the lungs collapse, just as a half-filled bladder collapses when it is lengthened, and the pressure of the atmosphere forces backwards the anterior walls of the chest.

In emphysema and bronchitis, in those cases where there is an obstruction to the entrance of air into the air cells through the smaller air tubes, the lower end of the sternum and the adjoining cartilages, fall backwards during inspiration, while the upper part of the chest expands, and the diaphragm descends with great power.

In pleuritis, with pleuritic effusion, the inspiratory expansion of the whole of the affected side of the chest is diminished, abolished, or, in some cases, even reversed, while that of the opposite side is throughout exaggerated. The inspiratory motion of the abdomen is also lessened or abolished in the affected side, while on the opposite side it is increased.

When the whole of the lung is consolidated from grey hepatization, or tuberculous deposit, or condensed from firm tendinous adhesions following pleuritis, then the expansion of the whole of the affected side is diminished, arrested, or reversed; while that of the healthy side is exaggerated.

When the upper lobe is affected with phthisis, or pneumonia, or any other local disease, the expansion

of that lobe is interfered with, and the inspiratory motion of the ribs over the affected lobe is diminished; while that of the ribs over the opposite lobe is usually increased.

It is not however alone in diseases of the upper lobe, that the motion of the ribs over that lobe, namely, the five superior ribs, is diminished, as the respiratory motion is lessened, or even arrested, when those ribs are injured or diseased, or when the intercostal muscles moving them are inflamed, or affected with pleurodynia, or when the motion of those ribs would produce pain or injury in the adjoining scapula, shoulder-joint, or arm, when they are injured or inflamed.

When the lower lobe is the seat of pneumonia, or any other disease, the motion of the ribs over that lobe is usually, but not in every case, diminished; and the motion of the abdomen just below the ribs, on the affected side, is always diminished in these cases.

When the heart is enlarged, and still more when it is adherent, there is diminished motion of all the ribs on the left side, with the exception usually of the second and third. If there be pericarditis, the motion is still more interfered with, and the motion of the abdomen just below the xiphoid cartilage is also much affected, being in all cases lessened, and in some extreme cases quite interrupted. While the motion of the centre of the abdomen is diminished, that of the abdominal walls at each side is usually not affected.

In peritonitis, if the disease be general, the abdominal motion is universally diminished; if it be partial, the diminution of respiratory motion is most marked over the immediate seat of the inflammation.

Dr. Sibson concluded by calling attention to the value of the signs afforded by the modification of the respiratory movements in disease, and to the aid which those signs give in arriving at an accurate diagnosis. The nature of the disease cannot be detected by the observation of the signs just indicated, but its seat is at once pointed out. In those persons who are really healthy, but who imagine themselves to be the subjects of chest-disease, the observation of the movements of respiration will almost always give the satisfactory, conclusive, and very comfortable knowledge, that the chest is healthy.

In general, the information as to the respiratory movements afforded by touch and sight is quite sufficient, but in cases of difficulty, the observations may be rendered minute and accurate by the aid of the chest measurer.

Dr. Butler Lane, of Ewell, exhibited various specimens of his "Medicinal Wines," and made some observations respecting them. His proposition was to form fluid essences of most of the vegetable articles of the *Materia Medica*, by applying the process of fermentation. He recommended the method of preparation in question as characterized by simplicity and utility, and possessing the following advantages:—

1. The fermented preparations are more permanent than the infusions and decoctions, and at the same time more readily available.

2. In a great measure the wines avoid the spirituous admixture of the tinctures, which is desirable, inasmuch that alcohol is ill adapted as a menstruum of many of the vegetable medicinal principles, often interfering with their due therapeutic influence, and, moreover,

the alcohol which does exist in the medicinal wines is in a condition of intimate combination, which renders it far less noxious than the comparatively raw state which it maintains in the tinctures.

3. The economy of the fermented preparations is obvious, since three pounds of sugar, on an average, will answer the purpose of half a gallon of spirit of wine.

4. The medicinal wines are more efficacious and agreeable than any other form of preparation.

Dr. Lane recommended the process to be tried, more especially with opium, gentian, and senna, and gave the following directions:—Either of the medicines is to be repeatedly macerated in hot water, until the active medicinal matter is judged to be extracted, and a sufficient bulk of fluid is obtained, to make an infusion in the same proportional strength as the respective tinctures; cold water only may be used to digest the senna if preferred, and will probably be equally efficient. The infusion is then to be strained off with sufficient pressure; but in respect of the opium, its entire bulk should be submitted to the fermenting process, with the exception of the coarse fibrous matter, which can readily be separated by filtering through fine canvass. In the next place, twelve ounces of white sugar are to be dissolved in each wine quart of the obtained watery extract, and the liquid being then placed in a wide-mouthed glass vessel, is to have a teaspoonful of good yeast added; it is then to be lightly covered over, and kept in a warm room, where the temperature is pretty equable (from 60° to 70°;) a high shelf in a kitchen is one of the best places which can be selected, as even at night, more heat will be retained in the upper part of that apartment than elsewhere. Fermentation will progress more or less rapidly, and any supernatant scum may be removed from time to time. After three or four weeks the intensity of the chemical action will be found to diminish materially; the sweetness will have gone off, and a considerable sediment will have been thrown down. The liquid will then have assumed the vinous character, and should be carefully decanted and strained from the dregs; then replaced, and suffered to undergo further slow fermentation, as far as it is readily susceptible thereof, being lightly closed as before. In two or three weeks it will become still and clear, and a great part of the sugar will have become converted into alcohol; then after remaining in a somewhat cooler temperature for a few days, the wine will be fit for bottling, care being taken that it be thoroughly fine, which must be effected artificially, if it have not taken place spontaneously.

Dr. Lane then read a communication addressed to him by Mr. Allan, of Epsom, who writes as follows:—“I have no hesitation in saying, that I consider the idea of vinous preparations as likely to lead to valuable results, for which the profession will be under great obligations to you. I have found no difficulty in making the wines of senna, ipecacuanha, and opium. As far as I have tried them in practice, I feel assured of their efficacy. The Vinum Sennæ is an elegant preparation, and in general use, must soon supersede the tincture. The Liquor Opii Vinosus, I consider as equivalent in power and effect to Battley's Liquor Opii Sedativus.”

Dr. Shelley, of Epsom, in a note addressed to Dr.

Lane, also writes thus:—“I have now for a few months past used your new medicinal preparations, and can speak with certainty as to their manifold advantages. Their efficacy is indubitable, and in many instances they are superior to the preparations of the same drugs now in use. The preparation of opium you gave me is certainly a very valuable medicine, producing the usual narcotic effects of that drug with certainty, and apparently without stimulating.” “The Vinum Gentianæ, which I have used most extensively, is by far the best preparation of that drug which has yet been produced: as a stomachic tonic it stands unrivalled, producing its effects with astonishing certainty in a very short time after its first exhibition.”

Of the Vinum Sennæ Dr. Shelley also speaks most highly, as being an efficacious and agreeable substitute for the ordinary black draught, and as an admirable aperient for children.

Mr. Gilbert, of London, formerly of St. Leonard's, exhibited a chair of peculiar construction, with appendages or attachments to facilitate the extraction of teeth, and adapted equally to render all operations about the face and head less painful to the patient and more easy to the operator.

The chair has a back which may be inclined to any angle; the top is hollowed and stuffed, so as to be semi-cylindrical for the reception of, and to enable the operator to come close to, the head of the patient. At the right hand side of the chair there is a fixed strong steel bar or stem, on which there is made to slide a branch with a socket, fixed at any required height by a set screw. The moveable bar being raised or lowered at will, holds another piece of metal or arm placed horizontally to the chair, which again holds a third piece of metal, which latter is the fulcrum on which the extracting instrument rests, and raises the tooth with the least possible laceration or bruising of the alveolar process and the gum, no pressure or lateral force being applied as with the common key, or other instrument operating in the same way.

The ordinary forceps is adapted to the fulcrum in the following manner:—The operator first causes the patient to recline back in the chair, and adjusts the bearing so that it will come between the teeth, and grasping the tooth with the forceps, causes the instrument to rest on the bearing, and lifts the tooth out of its socket, the forceps being applied above or below the rest according to whether the tooth to be extracted be in the upper or lower jaw. The bearing and sliding pieces may be covered with some soft fabric, and other appropriate instruments may be applied in the same mode.

Mr. Gilbert also shewed an instrument for drawing out the stumps of teeth, consisting of both a fixed and moveable claw, by which stumps deeply imbedded, and which are occasionally the opprobrium of the dentist's art, can be extracted with comparative ease and safety.

Mr. Gilbert's inventions and adaptations manifested much skill and ingenuity.

The chair is made by Mr. Mathews, Surgical Instrument Maker to King's College Hospital, 10, Portugal Street.

(To be continued.)

BIRMINGHAM PATHOLOGICAL SOCIETY.*

April 5th, 1849.

Dr. FLETCHER IN THE CHAIR.

Heart, with general and firm adhesions to the Pericardium, and slight warty deposits on the aortic and mitral valves: enlarged congested liver, and congested kidneys: extravasation on the surface of the brain.

Dr. Fletcher related the case as follows:—

John Hounslow, aged 14, admitted under my care November 10th, 1848, labouring from articular acute rheumatism and endocarditis. Had been ill nine days. He was a delicate lad, of rheumatic appearance; had caught cold nine days since, was taken with pains in the joints, and in a day or so was unable to move. Three years since he had acute rheumatism. The puffing of the joints is marked in the lower half of the body. Pulse 172, soft; tongue clean and moist. *Auscultation*: Systolic murmur is audible in præcordial region; maximum is obtained towards the heart's apex.

R. Vin. Colchici, Potass. Bicarb., utr. dr. ij.; Mist. Camph., oz. viiss. M. sumat oz. j., quartis horis. Emp. Lyttæ parv. præcordiis.

R. Hyd. Chloridi, gr. iij.; Pulv. Jalap. Co, gr. xij. M. Fiat Pulv. statim sumend. Beef tea and light pudding.

He was so much improved as to be free from all his rheumatic pains, and considered himself quite well; a seton was placed in the region of the heart and he was discharged.

Again admitted February 2nd, 1849. Enlargement of liver; anasarca; hypertrophy of heart; valvular disease.

This boy had only left the hospital a week, very much improved, but presenting all the symptoms of hypertrophied heart and mitral disease. During his stay at home he had several severe attacks of dyspnoea and acute pain in the lower part of the abdomen, and was so evidently getting worse that he was re-admitted. He is now suffering from extreme dyspnoea, pain in the chest and over the whole abdomen, particularly the left iliac region; his pulse extremely rapid; thirst great; tongue furred; urine scanty; face feet and legs oedematous.

R. Pulv. Doveri, Hydrarg. cum Cretâ, utr., gr. v. Fiat Pulv. hac nocte sumend.

3rd.—About the same as yesterday. Heart acting violently but with much diminished systolic murmur; the right hypochondrium tense and resisting; hepatic dulness extending to the umbilicus and all across the upper part of the abdomen; distinct evidence of fluid in the peritoneal cavity; tenderness of lower part of left side of abdomen; urine slightly albuminous, specific gravity 1030, very scanty, containing abundance of epithelial scales. R. Infus. Digital, oz. ij.; Potass. Acetat., dr. ij.; Mist. Camph., oz. vj.; sumat oz. j. quartis horis. Elaterii, gr. 1-6th.—R. Hydrarg. Chlor., gr. ij.; Extr. Hyoscy. Pil. Rhei, utr., gr. iv. Fiant pil. ij., horâ somni sumendæ. Emp. Lyttæ præcordiis. Ung. Sabineæ.

6th.—His kidneys acting very little; urine deposits a sediment nearly one-half its bulk, consisting almost exclusively of lithate of ammonia, more highly albuminous. Rep. Pil. Elaterii.

8th.—Has considerable troublesome cough; at the base of the lungs a submucous râle is heard, which has existed ever since an attack of pneumonia during his first stay in the hospital. R. Linctus Com., dr. j. pro re natâ.

10th.—Complains of pain in the lower part of the abdomen. Ordered a poultice.

11th.—Pain and tenderness in the left iliac region; moans very much during sleep; abdomen scarcely so tense. Hirud. viij., parti dolenti et postea cataplasmata. Hydrarg. Chloridi, gr. j.; Pulv. Ipecac. Co. gr. iij. Fiat Pulv. quartis horis sumend. Rept. Mist.

12th. Has been very ill during the night. Now appears to be dying, lips blue, talks incoherently, face pale and livid, pulse extremely feeble and thready. Tinct. Lavand. Co., dr. ij.; Aquæ Puræ, oz. iijss., Cap. Coch. Mag. Alt. horis. Rept. Pulv.

13th. Greatly revived this morning, but was so much worse last night that a small quantity of wine was given as a *dernier resort*. Pulse much improved in force. Pain and tension of belly diminished. Rept. Rem., omit. Vin.

14th.—Aspect greatly improved, passes more water; lower part of belly soft and fallen with scarcely any tenderness. R. Ammon. Carb., scr. j.; Liq. Ammoniae, oz. j. Mist. Camph., oz. viijss. M. Fiat Mist. sumat, oz. j., quartis horis. Rept. Pulv.

18th.—Urine clear, light amber colour, neutral, flocculent deposit by heat, cleared by nitric acid, sp. gr. 1018.

March 15th.—Since last report he has suffered from frequent attacks of dyspnoea and pains in the abdomen, making the whole prominent and resisting, the impulse of the heart communicates a wiry pulsation to the upper part of the abdomen a little above the umbilicus; distinct evidence of fluid in peritoneal sac.

28th.—For several days the dyspnoea has increased, the legs have become much swelled; face puffy; lips of a deep blue; decubitus on right side, over a great part of which there is marked dulness. The heart acts with vigour, no murmur audible, he had several convulsions during the night, precisely like the convulsions of young children; during them the face became completely congested, the jugulars full and tense, the whole neck puffed and swollen; pulse extremely weak. The convulsions increased until six o'clock, when he died.

Post-mortem examination thirty hours after death.—

Body generally oedematous. *Head*: The surface of the left hemisphere presented an extravasation in the vessels of the pia mater, irregular in outline, about the size of a half-crown piece, and two of the veins in its neighbourhood were filled by coagulated blood. The membranes everywhere were intensely congested, somewhat more difficult to tear from the brain than usual; no morbid appearance could be found in the interior of the organ. *Thorax*: The right lung was compressed against the spine and the upper part of the thoracic cavity; a large quantity of thin lemon-coloured fluid was contained therein. There was no lymph on its surface or in any membrane of the pleura; the lung was inflated with the greatest facility.

The left lung was engorged, otherwise healthy; the pericardium was universally adherent to the heart; in the substance of the adhesions in the inferior lateral surface of the right ventricle there was some gelatinous effusion. The heart enlarged and its left ventricle hypertrophied; weight, with pericardium attached, nearly sixteen ounces. The edges of the aortic and mitral valves were fringed by a bead-like line of minute lymph-granules. These were most obvious on the auricular side of the mitral valve, the anterior division of which was much thickened. *Abdomen:* The diaphragm was depressed, offering a perfect plane towards the abdominal cavity, even slightly convex in the mesian line. The liver greatly enlarged, reaching considerably lower than the umbilicus and nearly to the left hypochondrium. Its consistence was firmer than natural, and presented an intensely congested appearance. This occurred in patches to a greater degree in some portions of the organ, as if blood had been extravasated into the hepatic substance; weight two pounds six ounces. Spleen natural, two ounces and a half. Kidneys intensely congested, the vascular state of the cortical structure and its inter-tubular prolongation was extremely marked; capsule stripped with difficulty; right kidney weighed four ounces, left three ounces.

This case is peculiar from the marked systolic murmur which was most audible at the apex of the heart, just at the situation which indicated that it arose from the mitral valve; this ceased before death, and from the state of the heart now before you, must be supposed to have arisen from some friction in the pericardium, which ceased on the adhesions becoming more complete. I look upon this as a case of high physiological interest, shewing the effects of the obstruction to the circulation, caused by the pericardiac adhesions, aided by the slight disease of the sigmoid, aortic, and mitral valves, having effusions in all the serous cavities, congestion of the liver, kidneys, and lungs, and apoplexy of the membranes of the brain, and coagulation of blood in some of its vessels.

(To be continued.)

General Retrospect.

ANATOMY AND PHYSIOLOGY.

ON THE ARRANGEMENT OF THE AREOLAR SHEATH OF MUSCULAR FASCICULI IN ITS RELATION TO THE TENDON.

It is well known that the fasciculi of fibres of the muscles are surrounded by sheaths of areolar tissue, but the arrangement of the filaments and fibrous tissue forming the sheaths, and their relation with the tendon, has not been properly pointed out. From repeated observation, Dr. Leidy, who has investigated the point, has found that the filaments of fibrous tissue cross each other diagonally around the muscular fasciculi, forming a doubly-spiral extensible sheath. None of the filaments run in the direction of the length of the fasciculi, and but few are transverse. Many of the filaments of a sheath form an interlacement in the

same diagonal manner with the filaments of the sheaths of neighbouring fasciculi. This arrangement is readily distinguished, if several fasciculi be drawn slightly from each other upon a plate glass, and the intervening areolar tissue be viewed beneath the microscope. When the filaments reach the rounded extremities of the fasciculi, they become straight, and in this manner conjoin with the tendinous filaments originating at the extremities of the muscular fibres. The importance of this arrangement can be readily understood; from the diagonally crossing course of the areolar filaments, comparatively inelastic in themselves, the sheath is rendered elastic, thus permitting the muscular fibres freely to move without their action being interfered with, while at the point of attachment of the fasciculi, where any elasticity would be worse than useless, from the fact that part of the muscular action would be lost in the mere extension of an inelastic substance, we find the filaments arrange themselves so as to become part of the inextensible tendon.—*American Journal of the Medical Sciences, and Half-Yearly Abstract*, Vol. IX.

DESCENT OF THE TESTICLE.

By Dr. Beck.

The hypothesis that the gubernaculum testis arises from the base of the scrotum, and draws the testicle down, is absurd. The scrotum at first consists of the cutis and a fine layer of fascia superficialis, and within this there is a mass of soft gelatinous tissue which completely fills the sac; merely a few fibrous threads can be seen by the microscope, and from these the dartos is formed. Previous even to the existence of the Wolffian bodies, a peculiar ligamentous body can be observed, reaching from the lower end of the testicle to the inguinal canal, and surrounded by serous and cellular membranes. Before it enters the canal, it consists of an elastic, pulpy, greyish mass, in which the microscope shows fibres and cellular tissue, but no fat; after its entrance into the canal, no cellular or muscular tissues, which are generally represented as spreading out over the scrotum, can be observed, but a long, roundish, little sac is forced down before it through the external ring. This consists of three layers; the first could be followed to the external ring, and corresponded with the fascia superficialis; the second contains the muscular fibres, which arise in the canal, and the third consists of cellular and fibrous tissues. When these last are separated up to the internal ring, the peritoneum is seen to consist of two layers, of which the external forms the inner layer of the little sac, and the other closes completely the inner ring against the testicle. The testicle passes down into the two layers from behind forwards, and thus gains two peculiar coverings, one cellular and fibrous, the tunica albuginea, the other serous, the tunica adnata. The gubernaculum next appears, fixed to the lower end of the testicle, and growing downwards, draws the testicle into the canal; and it is by the further development of this gubernaculum, and by its own growth, that the testicle is at last brought into the scrotum, the gubernaculum forming a road for it. When the testicle has reached the base of the scrotum, the duty of the

gubernaculum is fulfilled. Here the testicle is covered by the cutis, fascia, and dartos, layers proper to the scrotum; the three layers which it has brought down with it, are the fascia superficialis, muscular fibres of int. obliq. and transv., and the cellular layer of the peritoneum; the tunica vaginalis and the adnata testiculalis are folds of its serous layer.—*Schmidt's Jahrbucher.*

E. H. Weber has for several years investigated the mode in which the descent of the testicle is effected in man and some of the lower animals. He finds that in the spot where the inguinal canal is to be formed, a closed sac is formed between the fibres of the abdominal muscles, and entirely independent of the peritoneum; it may be likened to a bursa mucosa, and considered as a serous sac. It increases upwards towards the abdomen, presses together the folds of peritoneum in which the testicle is suspended, and carries upwards muscular fibres from the int. obliq. to the lower part of the testicle. It hence appears that the gubernaculum of Hunter is not a solid cord, but a cavity covered by muscular fibres. The lower part of the sac grows downwards towards the scrotum, forming a way there for the testicle, even before this has commenced its descent; this lower part is not covered by muscular fibres. When the testicle descends, the upper part of the sac becomes doubled down into the lower, like a double nightcap; the process is best observed in hares and rabbits, and particularly in the beaver. This inversion is brought about by the natural formative action, and partly by the mechanical action of the muscles which surround the upper half of the sac; but their exact share in the process, and how this is effected, does not appear evident.—*Müller's Archiv.*

PATHOLOGY.

ON THE PATHOLOGICAL ANATOMY OF CHOLERA.

By Dr. Gairdner.

The author's observations are founded on the examination of eighty-nine fatal cases; the greater number were in previous good health. Several of the females were pregnant. The most important facts are thus stated:—

1. *Previous diseases.*—Cholera appears to have chiefly attacked those in previously good health, or suffering under chronic disease, and to have spared those who laboured under acute or active disease. It appears from these observations, that the idea that cholera attacks chiefly persons of infirm habit, is not born out.

2. *The blood* was much less affected than is supposed to be the case in cholera. Its coagulation in the heart and large vessels take place much as in other diseases. It was not darker than in other maladies. The microscope revealed nothing peculiar.

3. *Congestion* has been over-rated in relation to cholera. Though the lungs and right side of the heart were frequently loaded, the liver, spleen, and intestines were mostly paler than usual. The uterus and Fallopian tubes were generally engorged, as was also the nervous system of the brain; but these appearances are common to other diseases.

4. *Ecchymoses* in various situations were character-

istic of cholera, to an extent not common in other fatal diseases. They seldom occurred externally, except beneath the conjunctivæ. Among the internal organs, they were most frequent on the intestinal mucous membrane, especially of the colon; but they were also seen on the posterior surface of the heart, and in the cellular tissue surrounding the cervical vessels, and in that around the dura mater of the spinal canal.

5. *Glandular secretions.*—There is no evidence that any of these secretions, with the exception of that of the kidneys, is entirely suppressed. With regard to the bile, the non-elimination of which is so much insisted upon, the author found that so far from not being secreted, it was seen in normal quantity in the gall-bladder, and in some cases in quantities sufficient to distend that receptacle. He thinks, therefore, that the absence of bile in the evacuations is apparent rather than real, and may be accounted for by its diffusion over so large a quantity of fluid as is evolved in the cholera stools. The liver did not exhibit any microscopic changes.

The kidneys were found in much the same state as after scarlatina. The author alludes to the curious fact which has been verified in Paris, that the urine of convalescents from cholera is, in most cases, highly albuminous.

6. *Intestinal canal.*—The most frequent abnormal appearance was prominence of the intestinal glands, both aggregate and solitary, but especially of the latter. This condition was found in two-thirds of the cases. The ecchymoses which have been already alluded to, were circumscribed, of various depths of colour.

The intestinal contents resembled the stools. On microscopic examination they invariably showed immense quantities of perfect epithelium, which the author considers to be due to maceration after death. He comes to this conclusion from the fact, that the cholera stools do not contain perfect epithelium, and that the scales found in each part of the intestines are precisely those peculiar to those parts.

The stools separate by filtration into a colourless or slightly-coloured fluid, of an alkaline reaction, and a flaky sediment. The former has a specific gravity from 1005 to 1010; it does not necessarily contain albumen, but constantly contains an organic matter, with the chemical reactions of mucus. This matter has been called *albuminose* by M. Mialhe.

The flakes have also the ordinary characters of mucus.

7. *The nervous system* did not exhibit any appearances worthy of remark.

SURGERY.

VASCULAR TUMOUR OF THE FEMALE URETHRA.

Mr. Norman has contributed a paper on the morbid growth, known and first described by Sir C. Clarke as vascular tumour of the urethra. The author's opinions are embodied in the following conclusions:—

That the growths, although entitled to the appellation of vascular, differ much in other respects, especially as regards size, consistence, form, and sensibility.

Little has been made out in relation to their internal

structure. Mr. Quekett, whose description is the most recent, states that a specimen examined by him consisted of hypertrophied papillæ, invested with a thick layer of cuticle.

They are not malignant, but have a tendency to be reproduced. They are common to old and young, married and single. They have been ascribed to syphilis, but without sufficient reason.

The most constant symptom is pain on micturition, augmented by all movement of the vulva, and especially by coition. There are also severe sympathetic pains in the loins, pelvis, hip, inside of the thighs, and many of the symptoms of stone. To prevent any mistake on this point, careful examination should be made.

The treatment required is strictly local, and consists of ligature, excision, caustic, and pressure by bougies. All these may be successful in certain cases, but the author prefers ligature, which he employed in his own narrated cases.—*Edinburgh Monthly Journal*, June.

STRANGULATION OF THE BOWELS, CAUSED BY A DIVERTICULUM.

By Dr. Pirrie.

A young man, aged 17, had always been in health until the 22nd of April when he was suddenly seized with sickness, vomiting, and violent pain in the abdomen.

At the commencement of the attack there was no pain on pressure, or tenderness of the belly; on the contrary, the patient had a tendency to press the body, and turn himself in the bed, as in colic, whereas, in the course of a few hours, the pain on pressure became severe, and the abdomen tense and tumid. When seen by Dr. Pirrie, twenty-four hours before death, his symptoms were those of ileus; pulse 130; countenance collapsed. Death occurred in sixty hours from the commencement.

Post-mortem.—On opening the abdomen a small quantity of sero sanguineous fluid was found in the cavity of the peritoneum. The stomach, and a great part of the small intestine, were greatly distended, and covered with patches of lymph. The lower-third of the ileum, and the whole large intestine, were collapsed and empty. On displacing some of the convolutions of the small intestine, a portion of ileum, twelve inches in length, was found strangulated, the strangulation being effected by a diverticulum, having peculiar connections.—*Edinburgh Monthly Journal*, July.

TRACHEOTOMY IN CROUP.

M. Leroy, of Verbillé, in a paper on the propriety of performing this operation, determines that, although it would be wrong to perform it in the first instance, before medicinal means had been tried, it is equally injudicious to postpone it until the plastic secretion has reached the bronchial tubes, and the vital forces are greatly prostrated. He narrated cases in which the operation was perfectly successful.—*Archives Générales*, Mars. 1849.

A PROBABLE SIGN OF MASTURBATION IN FEMALES.

The sad consequences of solitary vice, though well recognised in the male, frequently pass unobserved in the female, in whom the habit is probably equally if not more common. The general ignorance on this

subject arises from the difficulty in obtaining those disclosures which are made by the other sex with less reluctance. M. Durr states that he has for a long time noticed that girls addicted to this vice are subject to warts on the index and medius fingers, the instruments of these disgusting practices. M. Vaudge has also detected the habit by this sign, in two cases of extreme emaciation and debility in females, which he could not otherwise account for.—*Revue Medico-Chirurgicale*, Avril, 1849.

DISPERSION OF A BURSA ON THE KNEE BY A FALL.

Mr. Lonsdale was consulted in a case of common enlarged bursa, in a housemaid, for which he had employed the usual treatment. The patient came to him one morning and informed him that the swelling had suddenly disappeared, after a fall on the knee. She felt the swelling give way, but experienced no pain.—*Medical Gazette*, May 25.

PASSAGE OF A TINNED IRON FORK THROUGH THE ALIMENTARY CANAL, AND FINAL EXPULSION.

M. Velpeau communicated to the Academy of Medicine, in the meeting of the 5th of June, an extraordinary fact, the relation of which was placed in his hands by Dr. Chemin, of Saints, near Coulommiers, in France. It appears that a farmer, thirty-two years of age, accidentally swallowed a small veal bone on the 15th of May, 1847; as respiration and deglutition became immediately very difficult and painful, he thrust a tinned iron fork (eight inches long, and one inch broad by the stem and teeth) into his throat to push down the bone, or bring it up again. This contrivance gave rise, first, to nausea, and then to such efforts of vomiting, that he lost hold of the fork, which, after a few attempts at deglutition, glided into the stomach. The man, frightened at this occurrence, repaired to Paris, where he consulted M. Velpeau and another practitioner. These gentlemen told him not to be alarmed, and that the fork would probably find its way by the natural outlet without any operation being called for. Having returned home, he placed himself under the care of Dr. Chemin, who watched the case. The patient complained of great pain after taking food or drink; has much nausea and water brash. The fork lay in the cardiac extremity of the stomach, the teeth turned to the left. There it remained for a fortnight, and was then felt to glide towards the pylorus, where it stayed four months. During all this time there were vomitings of black matter several times a day, and the mouth was continually filled with an aqueous fluid; pain very intense; epigastrium extremely tender; pulse normal; no appetite; food very badly borne, and drink giving great pain. The foreign body at last passed through the pylorus, and took thirteen months to proceed along the small intestines, when it stopped in the right iliac region, on a level with the ileo-cæcal valve. The pains were sharp and intermittent during this period; walking, and moving about the trunk caused pain and pricking. The patient can feel the fork with his hand in pressing on the abdomen; stools very painful. This foreign body, after five months' stay in the iliac region, began to dissolve. The patient then

complained of colic, and the stools got black and brick-coloured; costiveness; much gurgling; and abdomen tympanitic. For the next eight months there were costiveness and diarrhoea intermittently; colic less violent, and stools blackish. The patient, of his own accord, took to drinking five or six quarts of light wine per diem, and swallowed in the morning an ounce of spirit of aniseed, to get rid of flatulence. The appetite became at this period inordinate; five or six pounds of solid food a day hardly sufficed. The man resumed gradually his farming occupations, and recovered his strength. Towards the 10th of December, 1848, a very severe fit of colic came on, and the symptoms of sinking became very alarming. Two ounces of castor oil produced abundant stools, and the attack passed off. At last, on the 8th of February, 1849, twenty months after having swallowed the fork, the patient felt suddenly a very severe lumbar pain, a sort of shaking in the pelvis; weight in the anal region, and a desire to evacuate. The dejections were plentiful, and in them was found a large portion of the fork—namely, that part lying between the end and the teeth. The man is now quite well, and free from all pain. The treatment consisted of linseed tea, poultices, emollient enemata, hip-baths, and laxatives. A report is to be made to the Academy on this singular case, by Messrs. Laugier, Bricheateau, and Caventou.—*Lancet*, July 13.

MATERIA MEDICA.

GLYCERINE.

The employment of glycerine as an application in the treatment of deafness, and also for other purposes as a medicinal agent, has given rise to inquiries on the subject, on which account a few practical remarks may probably be interesting to some of our readers.

Glycerine is one of the products of the saponification of fatty oils. It is produced in large quantities in the soap manufactories in a very impure state, being contaminated with saline and empyreumatic matters, and having a very strong and disagreeable odour. In order to obtain glycerine from this source, the residuary liquors are evaporated and treated with alcohol, which dissolves out the glycerine. The alcohol having been separated by evaporation, the glycerine is diluted with water, and boiled with animal charcoal. This process must be repeated several times, or until the result is sufficiently free from smell. It is, however, extremely difficult to obtain pure glycerine from this source, on account of the nature and condition of the ingredients usually employed in soap making, which it is almost impossible to deprive of rancid odour.

The best method of obtaining glycerine for medicinal purposes, is to evaporate the water used in making emplastrum plumbi. When the oil employed is fresh, and the process is carefully conducted, the result is easily made fit for use, and is almost without odour. Any lead with which it may be contaminated, is separated by passing a stream of sulphuretted hydrogen through it when in a dilute state. The excess of gas escapes during the process of evaporation. If requisite it may be boiled with animal charcoal, filtered, and evaporated. The specific gravity, when reduced to the proper consistence, is 1.27.—*Pharmaceutical Journal*.

GLYCERINE NOT A REMEDY FOR DEAFNESS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

In your report of the proceedings of the Provincial Medical and Surgical Association at Worcester, I observe that my name is quoted as an advocate for the use of glycerine in deafness—in fact, it is denominated “Mr. Yearsley’s new medicine for deafness, Glycerine.”

I trust I shall never be guilty of anything half so absurd as to recommend this or any other lubricating fluid, to be applied to the outer passages of the ear, as a remedy for deafness. For years past I have denounced in my writings all such antiquated notions of treatment, which ought not to be talked of in the nineteenth century, and in the present state of our knowledge of diseases of the ear.

With the following brief extract from my work “On Deafness,” which I hope I may be allowed to quote, it will be seen how little likely I am to place any reliance on glycerine or any other oleaginous fluid:—“Almost all diseases of the ear originate in a morbid condition of the mucous membrane of the throat, nose, and ear, which becomes affected from a variety of causes, among which, cold, the exanthemata, and stomach derangement stand pre-eminent. . . . According as the disease terminates in simple thickening of the mucous membrane, in adhesion, in partial or total loss of the membrana tympani, in disorganisation of the whole mucous lining, loss of the ossicula, or of the inner membranes of the fenestra, so is the deafness more or less intense and confirmed.”

This is the plain and unvarnished explanation of the nature of deafness in its various degrees; and yet although this view of the subject has been propounded by me in medical periodicals and in my published works for more than nine years, how few of those who are called upon to treat diseases of the ear appear to have adopted it; at least it may be so inferred from their irrational persistence in directing their remedies to the external passages of the ear, altogether overlooking the state of the throat and inner passages.”

I have the honour to be, Sir,

Your very obedient servant.

JAMES YEARSLEY.

London, 15, Saville Row,

Aug. 17, 1849.

ON THE ADULTERATION OF FOOD AND DRINKS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

I beg to enclose some remarks on the dangerous practice of ignorant persons who too frequently adulterate food and drink, and if you think them sufficiently interesting, I shall feel obliged if you will publish them in the next number of your valuable Journal.

I am, yours obediently,

JUSTITIA.

For some years it has been my intention to lay before the Provincial Association some views likely to prevent the adulteration of food and drink, and if such measures can be successfully carried into effect, I think it will reflect credit on our Association, for it must undoubtedly prove a benefit to mankind.

It is well known that some of the innkeepers, of the lower stamp, use drugs in ale of most dangerous and deleterious qualities—such as tobacco, cocculus Indicus; and also others of less noxious qualities—grains of Paradise, gentian, quassia, &c.

If these crying evils were introduced before Parliament, our wise legislators would doubtless be able to adopt measures to protect the public from the direful consequences that too often ensue from this gross fraud. It must be evident that the influence of these narcotic beverages too often produces most serious diseases in the brain and digestive organs.*

If Government would send out six or twelve analytical chemists, the fines would remunerate them; and when they detect any person indulging in these base practices, a fine may be inflicted for the first offence, and a removal of the license for the second, or in any gross case, imprisonment. Stringent measures like these would soon remedy the evil.

I think no public body can be so safely entrusted with this important subject as the medical profession, and I wish such a boon to mankind to emanate from our valuable Association.

Alum and bone dust is constantly used in bread to make it white and light; chalk and other substances, and lately sugar of lead has been used by mistake, in the place of alum, and nearly one thousand persons seriously injured in health. Sugar of lead is frequently used to improve acid wines, cider, &c.

The drugs that are used in ale and porter save a great quantity of hops and malt.

A respectable maltster told me the following anecdote:—A customer of his one night became intoxicated, went to sleep, and neglected his brewing of ale; a considerable portion boiled over and was lost. He received a severe reprimand from his wife. Oh! said he, I can make that all quite right by a pound of tobacco, which poison he actually used to make up the deficiency; and he frequently told the maltster that the colliers and other persons told him it was the best ale he ever possessed, because it was dark coloured, strong, and intoxicating.

In this town I have often heard of persons taking their friends to certain low public houses, to make them gloriously tipsy for three-pence, and have myself known persons suffer severely from small quantities of this unwholesome beverage. At present there is a fine for drugging ale, porter, &c., when it is proved by the exciseman finding the ingredients in the barrels, and fines were occasionally inflicted in earlier years; but in modern days brewers make an infusion of these articles, and pour it into the barrels, consequently the exciseman's knowledge is of no use whatever. One analytical chemist would be of more benefit than a

thousand excisemen, for he could apply tests that would satisfy a scientific public. Druggists sell articles of this nature for brewing, called "The Stuff."

Medical Intelligence.

THE LATE MR. CHARLES ASTON KEY.

We have this week to announce the death of this distinguished surgeon, and we copy from our contemporary, the *Medical Gazette*, the following particulars:—

It appears that the deceased did not complain of indisposition until eleven o'clock on the morning of Wednesday, the 22nd instant, and that he died from the effects of a severe attack of malignant cholera at seven o'clock on the morning of the 23rd, after an illness of about twenty hours. Every effort was made to save a life so valuable to the profession, but in vain.

Mr. C. A. Key became a member of the College of Surgeons on the 5th of January, 1821. He soon after assisted Sir Astley Cooper in the delivery of the Anatomical Lectures at St. Thomas's Hospital. In the year 1823, he succeeded Mr. Lucas as Surgeon to Guy's Hospital, and soon acquired great repute as an operator. His dexterity as a lithotomist made him generally known to the profession.

On the separation of Guy's and St. Thomas's Hospitals as medical schools, Mr. Key became jointly with the late Mr. Morgan, Professor of Surgery; and this post he held until a few years since, when the Chair of Surgery was taken by Mr. Bransby Cooper.

In 1843, Mr. Key became under the Charter a Fellow of the Royal College of Surgeons, and in 1845 he was elected by the Fellows a Member of the Council. At the time of his death he was senior surgeon to Guy's Hospital, and surgeon in ordinary to His Royal Highness Prince Albert. Mr. Key was not a large contributor to medical literature,—a circumstance which is probably to be ascribed to the very extensive practice in which he has been for some years engaged. His writings chiefly consist of folio monographs, on Lithotomy and Hernia, and of some casual contributions to the pages of this and other journals. The deceased had a highly cultivated mind, and devoted part of his leisure time to the study of chemistry and physics. His untimely loss will be deeply regretted not only by those who knew him in private life, but by the whole profession.

ROYAL INFIRMARY FOR CHILDREN.

Dr. S. Wm. J. Merriman has been elected one of the Physicians to the Royal Infirmary for Children.

UNIVERSITY OF LONDON.

FIRST EXAMINATION FOR THE DEGREE OF M.B.—1849.

Examination for Honours.

Anatomy and Physiology.—Charles Pardey—*Exhibition and Gold Medal*—King's College; Henry Thompson—*Gold Medal*—University College; Richd. Neale, University College; Thomas James Duthoit,

St. Bartholomew's Hospital; George May, King's College; John Phillipson Langham, University College; Edward Abraham Hancock Head, King's College.

Chemistry.—Charles Pardey—*Gold Medal*—King's College; William Odling—*Gold Medal*—Guy's Hospital; Edward Abraham Hancock Head, King's College; Henry Thomson, University College.

Materia Medica and Pharmaceutical Chemistry.—George May—*Exhibition and Gold Medal*—King's College; Wm. Odling—*Gold Medal*—Guy's Hospital; Charles Pardey, King's College; Joseph Houlton, Charing Cross Hospital; Richard Neale, University College; Edward Abraham Hancock Head, King's College; John Sherwood Stocker, Guy's Hospital.

Botany.—Charles Pardey—*Gold Medal*—King's College; Richard Neale, University College; William Odling, Guy's Hospital.

ROYAL COLLEGE OF SURGEONS.

THE COLLEGE LIBRARY.—The library of the Royal College of Surgeons was closed on the 24th ult., and will re-open on the 25th of September, after which the hours of attendance, in pursuance of a request made to the Council, will be from twelve to six, instead of ten till four, as heretofore.

THE COURT OF EXAMINERS.—The Court of Examiners of the Royal College of Surgeons have been meeting three times a week lately, for the examination of candidates for their diploma. From our published lists it will be seen, that in one week they assembled four times, including the occasions for the examinations for the "fellowship," of which, by-the-by, there will be only one more before the new regulations come into force, for examining junior candidates as to their proficiency in the Greek and Latin languages.

Gentlemen admitted Members on Friday, August 17th, 1849:—Bagley Thomas Hunter Bell, Pocklington, Yorkshire; James Hannan, Limerick; John Abernethy Kingdon, Bank Buildings, City; Charles William Sadler Large, Camberwell; Charles Caulfield Moore, Brimpsfield, Gloucestershire; Thomas Mills, Tipton, Staffordshire; Wm. Watts Thetford, Dublin.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Members on Thursday, August 16th, 1849:—William Clapham Cantley, Hedon, Hull; Thomas Edis; Thomas Brutton Kenderdine, Stafford; Wm. Bellhouse Minwood, Manchester; John Adams Palin; Francis Henry Vertue.

Gentlemen admitted Members on Thursday, August 23rd, 1849:—Benjamin Webster, Morley Lodge, Leeds; Rawson Senior, Batley, near Dewsbury, Yorkshire; John Earnshaw, Clitheroe, Lancashire; George Burnham, Great Grimsby.

OBITUARY.

On the 18th instant, at 22, Charlotte Street, Leith, Walter Bruce, M.D.

On the 21st instant, at 14, Clerk Street, Edinburgh, Dr. George Wigton.

On the 24th instant, aged 53, Dr. John Udny, M.D., Surgeon Superintendent of the Cholera Hospital, Toxteth Park.

On the 25th instant, at Glasgow, William Crawford, Esq., M.D., late of Port-Glasgow.

BOOKS RECEIVED.

First Principles of Medicine. By A. Billing, M.D., A.M., F.R.S. Fifth edition. London: S. Highley. 1849. 8vo, pp. 332.

A Treatise on Cholera. By Nathaniel Alcock, A.B., M.B. London: John Churchill. 1849. 8vo, pp. 189.

The Pathology, Treatment, and Prevention of Cholera. By G. Fife, M.D. London: Simpkin, Marshall, and Co. 1848. 8vo, pp. 20.

Proceedings of the Westminster Medical Society, Session 1848-9.

Some Account of the Life, Writings, and Character of the late James Cowles Prichard, M.D., F.R.S., M.R.I.A. By John Addington Symonds, M.D. 1849. 8vo, pp. 54.

Portraits of the Diseases of the Scalp. By Walter Cooper Dundy, Surgeon to the Royal Infirmary for Children. Part 2nd. London: Samuel Highley. 1849.

Oppenheim's Zeitschrift für die gesammte Medicin, &c. Nos. 34, and 5, March, April, and May, 1849.

Every Man his Own Doctor.—The Cold Water, Tepid Water, and Friction Cure, &c. By Captain R. T. Claridge.

Mémoire sur le Développement, les Causes, et le Traitement du Choléra. Par Ch. Doorjak. Saint-Petersbourg. 1848.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

NOTICE TO MEMBERS.

The Secretary presents his compliments to those members of the Provincial Medical and Surgical Association whose Subscriptions remain in Arrear, and begs respectfully to call their attention to the following Law, which was passed unanimously at the Anniversary Meeting, held at Bath, in 1848:—

"If any Member's Subscription remain unpaid twelve months after it shall have become due, the Medical Journal and other publications of the Society shall be withheld from such Member till his arrears be paid."

He earnestly entreats all those gentlemen whose Subscriptions are now in arrear, that they will cause them to be paid, either to himself, or to the Treasurer, Dr. Hastings, without further delay.

JAMES P. SHEPPARD,

Secretary to the Association.

Worcester, August 6th, 1849.

TO CORRESPONDENTS.

Communications have been received from Dr. Duncan, Mr. Collins, Mr. Williams, Dr. Ogier Ward.

In consequence of the lamented death of Dr. Streeten, it is requested that all letters and communications be sent to J. H. Walsh, Esq., Foregate Street, Worcester. Parcels and books for review may be addressed to the care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON SURGERY,

DELIVERED IN THE
MEDICAL SCHOOL OF CAMBRIDGE.

BY GEORGE MURRAY HUMPHRY, Esq.,
Downing College, Surgeon to Addenbrooke's Hospital.

LECTURE XIII.

UNUNITED FRACTURES.

Causes of failure of union ; want of reparative vigour ; want of rest ; changes occurring in either case ; treatment ; formation of false joints.—Situations where union oftenest fails.—Cause of failure of union after fracture of the patella, olecranon, os calcis, and acromion. Treatment of these fractures.—Liability of neck of thigh-bone to be broken in old people ; causes of union so generally failing ; changes occurring after the accident ; formation of crutch ; absorption of neck ; circumstances under which bony union may take place ; effects of rheumatic disease may be mistaken for it ; how they may be distinguished ; extra-capsular fractures ; symptoms of fracture of neck of thigh-bone ; difficulties in diagnosis ; general rules of treatment.

It is, I believe, now generally admitted that fractures in any part of the skeleton may, under favourable circumstances, be reunited by bone. That the long and complicated process by which bony union is effected should sometimes fail, and the reparative efforts cease without having accomplished their object, need be no matter of surprise when we reflect upon the various circumstances that may occur to interfere with them. You may perhaps have observed that in ulcers, whose healing has been long prevented, the reparative processes cease to go on, the sore becomes languid and pale, cicatrization stops, and the surface discharges only a little thin fluid. Nature seems content to bear the malady and desists from any further expenditure of strength in futile efforts to cure it. The same thing happens when the reunion of a fracture has been long prevented ; all attempts at reparation are after a time given up, as it were in disgust, and the part falls into a quiet state. How long a period is required thus effectually to tire out the reparative forces is not certain ; no doubt it varies a good deal. You remember the lad lately in the hospital in whom reunion of the femur took place more than a year

after the injury. In his case the reparative processes were not hindered by any want of care or attention to the fracture, but they never set about their work with energy, in consequence, probably, of the weak low-spirited condition of the boy, till he was allowed to get up, thirteen months after the accident, when the other thigh-bone broke near the knee under the weight of his body. He was then again necessarily confined to his bed, and to our surprise, both fractures united in about two months.

The two chief causes which prevent the reunion of fractures in the ordinary way, are deficiency of reparative vigour and want of rest.

The first of these causes is most frequently observed in old people, whose powers of nutrition are scarcely able to maintain the tottering fabric, and are still less able to make the extraordinary efforts required in the repair of injuries. At that time of life atrophy predominates in the skeleton no less than in other parts, and the inflammation consequent on the fracture of a bone gives a stimulus to its absorption if it be unable to overcome this natural tendency to wasting, and by a little further effort, to institute reparation. Here is the broken femur of an old man which remains ununited long after the usual period of healing has passed away, and you can see that scarce any attempts have been made to fill up the breach. There is no callus around the broken ends, and only a soft porous crumbling plug, partially closing the extremities of the medullary canal. The bone is throughout light and spongy, in a state of atrophy ; for some distance above and below the fracture it is very porous and worm-eaten on the outside, and the sharp edges of the fracture are rounded off, as though all idea of attempting reunion had long been given up, if it was ever entertained. We may suppose that a slight degree of inflammation has been set up in the neighbourhood of the fracture, and has occasioned interstitial absorption of the extremities of the bone. That condition of the bone in short, which I have described usually to follow a fracture has existed, but in an exaggerated degree, and the inflammation has accomplished no reparative work, none at least of sufficient solidity to remain after maceration. It has widened instead of closing the breach. Sometimes the ends of the bone necrose, and specimens of this kind look as if they had been the subject of compound fracture, and as if the inflammation, in consequence of its severity, had occasioned only destructive results, viz., interstitial

absorption, ulceration, or mortification. There is, however, this wide distinction, that the destructive effects are in these cases due, not to the *excess* of inflammation, but to the *inability* of the tissue to bear that slight modification of the nutritive processes, attendant on reparation, which we call the first stage of inflammation.

The treatment of such cases after union has failed, is not likely to be attended with very favourable results. Generally, the old man sinks under the confinement: bed-sores form or he becomes delirious and paralytic. Sometimes, in consequence of his incessant restlessness and the movements to which the fracture is subjected, suppuration takes place with necrosis of the ends of the bones, the soft parts give way and the bone projects through the wound. All this may be attended with very little pain; the old man seeming to be scarcely conscious of a local ailment dozes and is delirious by turns, and dies at length of exhaustion. Now and then things take a more favourable turn. I remember a feeble man, aged 67, who broke his humerus near the middle. He was very restless at first and the position of the limb was disturbed as soon as rectified. In a few days, however, he became more quiet. Great pains were taken to prevent the displacement of the fractured surfaces, but at the end of six months no union had been effected; the ends of the bone could be felt grating upon one another. Accordingly, an incision was made down to the part, and some necrosed or carious fragments were broken off from one end of the bone with the forceps. Inflammation and suppuration followed, but were not very severe. The wound healed in course of time and the fracture was firmly united in two months. Such success is very rare, and the frequent unfavourable termination of these cases should warn you to pay very great attention to the treatment of fractures in old people, during the early stages. Give them every chance of uniting at first by securing the limb with well-padded splints. Allow rather more liberal diet than the patient is accustomed to. Do not confine him to bed longer than is necessary, rather make use of the egg splints and starch bandage, so that he may get up and move about. The retentive means must be applied longer than under ordinary circumstances, and the work of reparation may be sometimes set going by rubbing the broken surfaces together, or by the application of a stimulating fluid, such as the tincture of iodine, to the skin over the fracture.

When the reunion of a fracture has been prevented by want of rest, the state of the parts contrasts strongly with the specimen I last showed you. There is, in such cases, no want of evidence of reparative force; abundant callus is produced upon each of the broken ends, but the inosculation of the callus between the two extremities across the line of fracture is prevented by the continual movement of one upon the other. I told you that this inosculation across the line of fracture is the most difficult part of the ossifying process. When it has been interfered with for a considerable length of time the uniting medium remains soft and degenerates into fibrous tissue, without, perhaps, ever having attained even the cartilaginous state.

In this specimen of ununited fracture of the clavicle, the broken ends are surrounded by plenty of callus and the surfaces are applied and moulded to one another, but they are joined only by fibrous tissue.

It often happens, when the ossification of this part of the callus has been prevented, and the friction of the broken surfaces upon one another is continued, that the soft uniting medium between the two bones undergoes various changes. Most commonly, as in the specimen I just showed you, it is transformed into tough fibrous structure which holds the parts firmly together, though it permits some movement between them. Subsequently the fibrous tissue may, by continual attrition, be worn away from the centre of the fracture, and a sac, like a bursa, is formed there, which simulates the cavity of a joint, and is surrounded by a capsule of fibrous tissue passing from one end of the bone to the other, at the circumference of the fracture. The resemblance to a joint becomes more complete, if some cartilage have been formed upon the ends of the bone. Frequently the broken ends become smooth from friction upon one another, and acquire the polished porcelain-like appearance which we find in joints where the movements have been retained after the absorption of their cartilages. These instances of want of bony union from incomplete ossification of the callus are called false joints, and the name is not a bad one, for you observe how each of the constituents of a joint—the synovial cavity invested by an external fibrous capsule, the enlarged smooth extremities of the bones, and even the presence of a structure-like cartilage—may be wrought out of the uniting medium when it is subject to the movements of the broken ends upon one another.

If the uniting medium has fallen into any one of the states I have described, it is exceedingly difficult to recal the reparative processes so as to excite again the disposition to form bone. A variety of modes of treatment have been adopted with this view, such as rubbing the broken surfaces together, stimulating applications to the skin, setons passed through the fracture, and even the excision of the ununited extremities. Unfortunately, none of these measures have been attended with sufficient success to justify much confidence in them. Cases too often resist them one after the other, and the patient having undergone much suffering, is content to remain as he was, deriving some assistance from mechanical appliances, or he is even glad to part with a member now useless and cumbersome. I do not mean to say that you should not resort to these measures, for they are now and then successful, and are therefore decidedly worth trying; but you will do well to apprise the patient of their uncertainty before attempting them; at any rate, before determining to cut out the broken ends, I would advise you to give the case a fair trial of continued rest to the fractured part by well-applied splints, and you will be surprised at the benefit which sometimes results from this treatment in cases apparently hopeless. The fibrous structure into which the uniting medium has degenerated may in course of time become ossified if complete rest be permitted; but this is not likely to occur when other changes have

taken place in it, such as the formation of a synovial sac, &c.

The failure of union has been observed more frequently in fractures of the middle of the humerus than in other situations. This is probably explained, in part, by the difficulty of keeping the fracture at rest, while the hand and fore-arm are allowed their liberty, and in part by the humerus being in two-thirds of its circumference here surrounded by the tendinous attachments of muscles; the deltoid, coraco-brachialis, and brachialis anticus are all inserted hereabouts, and the connection of the periosteum with the bone, is in consequence very close. I give this as affording some explanation of the frequent failure of union, because it has been ascertained by experiment, that the periosteum, both in the neighbourhood of epiphyses and near the insertion of tendons is loosened with much difficulty by inflammation, and little bony matter is in consequence deposited in such situations after fracture. Next to the humerus the collar-bone is most frequently the seat of ununited fracture. Failure of union may also take place in the femur, tibia, and in other bones.

It now and then happens that the re-union of a fracture is prevented by great displacement of the broken ends, or by muscular fibres or other structures intervening between them. Even then the broken surfaces are generally bound together by tough fibrous tissue; they are sometimes thickened by the formation of callus upon them, and they become rounded and smooth, and covered perhaps, by a bursa.

I have several times had occasion to notice the slow and difficult manner in which ossification of the lymph effused in the neighbourhood of a fracture proceeds from the extremities of the broken bone. The fractures of the skull are remarkable instances of this, for they are not followed by the formation of bone under the pericranium or upon the dura mater, but they are united by callus springing from the sides of the fissure and insinuating across the chink. This process is so slow, that if the fissure be wide, it will remain open for years. Even when narrow it is seldom quite filled up, especially in its outer part. Indeed, in this situation, the chink is often widened by the absorption of the sharp edges of the bones which bound it, so as to form a groove on the exterior of the skull, marking the course of the fracture for ever afterwards. In ordinary fractures of the shafts of long bones, when the periosteum is much separated, I told you that the ossification of the callus lying between the broken edges of the bone takes place very slowly, never proceeds to any great extent, and that union is for a long time dependent upon callus proceeding from the neighbourhood of the periosteum. The formation of bone is, I grant, effected more quickly upon the spongy or medullary tissue, than on the compact outer wall of the shaft, but even here it is very limited, so much so as to be really of no avail if the fractured surfaces be separated a little distance.

Let me also here again remind you that the periosteum is closely connected with the bones about their spongy extremities and in the neighbourhood of the attachment of tendinous expansions, and is conse-

quently torn through in case of fracture in such situations, nearly on a line with the fissure, without being separated from the sides of the bone, so that very little external or provisional callus is formed; and the reunion of bones so circumstanced is dependent almost entirely upon the ossification taking place between the broken extremities. If, therefore, these be not maintained in close contact, the chances of union by bone are not very great.

Now, you will at once perceive how unfavourably the patella is placed for the reunion—by bone—of its fractures, and will not be surprised that it very seldom occurs. On the one side it is covered by cartilage and exposed to the joint, so that there is no possibility of the formation of any callus in this direction. On the other sides it is invested by a tough, fibrous, closely adherent structure, and covered by fascia, rendering the production of callus here scarcely more probable than on its articular surface. There is no chance, therefore, of assistance from any external callus on either side, and the work of reparation must be entirely conducted between the fractured surfaces, which, as I have told you, can only be done effectually when those surfaces are maintained in close contact. But, unfortunately, the very cause which breaks the patella, almost invariably occasions the separation of its fragments to a distance far too great to be filled up in this manner. The bone is commonly snapped transversely, by a sudden forcible contraction of the great quadriceps muscle, made to prevent the person falling; and the upper and lower fragments are, by the same force, pulled widely apart. It follows as a result of all these unfavourable circumstances, that the fracture is united only by tough fibrous tissue, passing from one portion to the other over the joint. This structure is connected chiefly with the hinder edges of the broken surfaces, in consequence of the position of the fragments, and the direction of the pull made upon them by the muscles.

That the patella is not itself deficient in reparative force, is proved by the enlargement of the broken segments which takes place owing to the formation of bony matter upon their edges and surfaces, each one of the fragments being often found to have attained the size of an ordinary patella. It is further proved by the fact, that under favourable circumstances bony union of the patella will take place as quickly and as well as in other parts of the skeleton. This has in several instances been found to occur in longitudinal fractures occasioned by falls upon the knee, and occasionally in transverse fractures caused in the same way. The experiments of Mr. Gulliver also show that bony union will take place in animals, without difficulty, when the patella is divided transversely, without laceration of its fibrous investment, or separation of the fragments.

The olecranon is circumstanced in a very similar manner to the patella, being on the one side exposed to a joint, and on the other covered by the fibrous expansion of the triceps tendon and a closely adherent periosteum, so that there is very little probability of external callus being formed in either direction. It is generally broken by a blow, but the detached fragment is drawn to such a distance from the rest of the bone,

by the contractions of the triceps muscle, that firm union scarcely ever takes place.

The acromion, hinder part of the os calcis, and some other projecting processes of the skeleton, though not in contact with a joint, are in many respects similarly circumstanced with the patella and olecranon; they are invested by closely adherent periosteum, and furnish points of attachment for muscles, which are constantly pulling upon them, and will drag away from the main bone any fragments that may chance to be broken off. Hence it is that bony union often fails to take place in each of these parts of the skeleton; not because they have less reparative vigour than other bones, (for under favourable conditions they will all unite well enough,) but because the great interval between their divided surfaces cannot be filled up by new bone derived only from the broken extremities; and from the particular structure and close adhesion of the periosteum, very little assistance is furnished in the way of external callus.

In the treatment of the fractures of these parts we place the limb in such positions as will best relax the muscles, whose influence is so pernicious, and we endeavour to bring the fragments into contact by straps and bandages; not that I think these retentive measures are often of much service. We can scarcely expect to secure such close co-aptation of the broken surfaces as to lead to bony union of them, but it is desirable that they should be as near together, and the fibrous band that connects them as short as possible. Be careful not to allow the patient to use the limb too early, for this fibrous band is a long time in acquiring its full strength, and is liable to be stretched for some weeks after its formation. I give you this caution because I have known the interval between the fractured surfaces of a patella increase from half an inch to two inches, when the patient was allowed to leave her bed and bear upon the limb, six weeks after the injury, the fibrous bond of union not having even at that time acquired sufficient firmness and power of resisting extension.

The neck of the thigh bone is another part of the skeleton placed in a manner peculiarly unfavourable for the re-union of fractures, and it is especially liable to be broken at the time of life when the reparative forces are least able to overcome a difficulty. It is entirely surrounded by synovial membrane, from which it is separated only by a thin layer of compact fibrous tissue, which supplies the place of periosteum, and it is composed in great measure of cancellous structure. I have already told you that the cancellous parts of the skeleton are more subject to senile atrophy than the shafts and compact tissue of bones. The neck of the femur seems to be peculiarly liable to this atrophy, as well as to undergo the fatty degeneration, and other changes, which impair the structure and diminish the strength of the bones in old age. Hence it is that fractures of this part are so common in elderly persons. The accident is usually caused by a fall. An old man slips down; he may not appear, perhaps, to fall upon his hip, but is unable to get up, and when he is raised the neck of the thigh bone is found to be broken. The liability of this part of the skeleton to give way in old

age is so great, that if the body be subjected to a shock sufficiently severe to break a bone, there is great chance of the occurrence of the accident we are now speaking of. You will not be surprised that such is the case when you examine these thigh bones taken from old people, and see how light and porous they are about their upper ends.

The neck of the femur is most frequently broken near the head, where it is narrowest, and the line of fracture generally runs a little obliquely from above downwards and outwards; it may, however, be broken in any other part. In whatever situation the bone gives way, and in whatever manner the accident has been occasioned, you will generally find that the synovial membrane and fibrous investment are torn through in front, but remain entire behind, to a greater or less extent. This is, I think, sufficiently accounted for by the greater thickness and looseness of the fibrous structure on the hinder surface of the bone, as well as by the slight curve forwards which may be always observed in the neck of the femur. In consequence of this curve, when fracture results from a blow upon the trochanter, the neck yields in an anterior direction, and the fibrous tissue and synovial membrane are torn through in front by the sharp projecting edges of the bone; whereas on the hinder or concave side of the neck, which becomes bent to an angle, these structures escape uninjured.

Suppose a fracture to have taken place in the manner described, passing through some part of the neck of the femur, and separating the head from the trochanters, a slight connection only being maintained between them by some of the untorn fibres of the ligamentous aponeurosis on the hinder surface of the neck. The bone is in the most unfavourable condition possible for reparation; there is no probability of assistance from the formation of external callus, because a few ligamentous fibres on one side, covered by a delicate synovial membrane, only intervene between the fracture and the articular cavity; the prospect of re-union, therefore, depends entirely upon the growth of bone from the broken surfaces, and its inosculation across the line of fracture. We have seen how slowly this formation of bone takes place from the surface of a fracture under ordinary circumstances, especially in old people, and the neck of the thigh bone seems to be even less fitted to carry on any work of reparation than the other parts of the skeleton, because the nutritive functions are less active in it, which may be inferred from the circumstance of atrophy and other senile changes being more marked, and occurring at an earlier period in this than in other bones. The same causes which promote its liability to suffer injury all combine to diminish its power of reparation, and you will be struck, as we proceed, with the very slight efforts at re-union which are found to have taken place in cases of fracture of this part of the femur. It is true that the exact coaptation of the broken surfaces is not generally maintained, and that some movement of them is permitted, but you will see that the want of union does not depend so much upon a failure of the inosculation of callus across the line of fracture, as upon the absence of any attempts to produce a callus at

all. Now and then, it may be, there is a little bony deposit upon the broken ends, sufficient, perhaps, to close up the open cells of the spongy tissue, but even this is often wanting, and, as a general rule, the absorption of the old bone goes on to a far greater extent than the formation of the new.

Upon what this deficiency of nutritive and reparative energy depends, which leads to the premature occurrence of senile changes in the neck of the bone, and unfits it for the reunion of its fractures, I cannot tell. It seems to be connected with some peculiarity in the development of the bone of a similar kind to that which leads to the formation of the areus senilis in the circumference of the cornea, and the earthy degeneration of certain parts of the arterial tubes. It cannot be owing, as some have supposed, to the small supply of blood furnished to the head of the bone through the ligamentum teres, because its effects are no less remarkable on the side of the fracture next the trochanters; indeed, as I shall presently have occasion to show you, the absorption of the neck after fracture goes on to the greatest extent in this latter direction.

You will understand, then, that the failure of bony union, after fracture of the neck of the femur, depends first and chiefly upon the peculiar position of the bone, and the character of its periosteum, which preclude the formation of any *external* callus; secondly, upon the displacement of the broken surfaces; and, thirdly, upon a want of nutritive energy in the bone itself, occasioning a difficulty in the production of callus at all. These several causes usually coexisting render the osseous reunion of this bone so rare an event, that Sir Astley Cooper and other distinguished surgeons of the last generation in this country were wont to deny the possibility of its occurrence, under any circumstances. More extended observation has shown this opinion not to be altogether correct, though the well marked instances which have been adduced to disprove it are few, and so far as I have been able to judge, they consist of cases in which the broken surfaces were wedged in together at the time of the fracture, so as to prevent any subsequent displacement, and to secure their close and constant adaptation to one another.

The changes actually following a fracture through the neck of the thigh bone are interesting. The extravasated blood is absorbed, and some lymph is effused into the joint. This lymph lines the synovial cavity, and covers the broken surfaces. It is not found in any great quantities in the latter situation, never fills up the interval between the bones, and seldom even extends from one to the other over the fracture, except at the hinder part, when the synovial membrane and fibrous investment remain untrorn. In process of time the lymph becomes converted into a tough structure, which assumes the form of fibres, bands, or peduncular growths, upon the inside of the capsule, upon the neck of the bone, and upon the surfaces of the fracture. Sometimes these bands reach from one part of the joint to another, or extend between the broken ends. The latter are generally covered by more or less of

the adventitious substance, and occasionally also by nodules of dense structure, like cartilage, but neither of these formations exist in any great quantities upon the broken bones, and very rarely do they become ossified; indeed, it seldom happens that any new bone at all is produced in this situation; the open cancelli may be blocked up by a little callus, which is the most that takes place, and even this very often does not occur. Not only is the capsule of the joint *lined* by lymph, which undergoes the changes I have mentioned, but it becomes *thickened* also by the effusion of lymph into its substance, and subsequently undergoes *contraction*, so as to fix the trochanter firmly to the pelvis, and in a measure to supply the place of the broken bone, by bearing the weight of the body. The articular surfaces may remain for a long time unimpaired, or they may become more or less closely adherent together. Occasionally the cartilages are rendered uneven or fibrous by partial absorption, but the bony structure beneath is hardly ever found to have undergone much change.

Although no callus whatever is formed around the broken extremities, and very little upon their opposed surfaces, we, nevertheless, often find in the dissection of these cases, that a good deal of bony deposit has occurred, in nodules and masses, about the line of attachment of the capsule to the base of the neck. This takes place chiefly at the lower part, and forms projecting lumps, which extend nearly, or even quite, to the acetabulum. From the mode in which this callus, so far distant from the seat of fracture, has been observed to support the pelvis, the term *crutch* has been applied to it by Mr. Langstaff. It is no doubt occasionally of much assistance in bearing the weight of the body, and together with the thickened capsule, may supply the place of the neck so well, that the patient is able to walk about with a stick.

Another remarkable change usually follows this accident—I mean the removal by absorption entirely, or in part, of the neck of the bone. This takes place chiefly on the side of the fracture next to the trochanters, and in a slight degree only in the portion which remains connected with the head, so that the extent to which the neck is absorbed depends upon the situation of the fracture. When that has taken place near to the head of the bone, the whole neck is very often removed down to a level with the trochanters, and in course of time, the head and the trochanters coming into contact, their opposed surfaces are polished by the friction of one upon the other. You will meet with many specimens in museums where the neck of the thigh bone has been quite absorbed, and the head and trochanters are polished by mutual attrition in the way I mention. When the fracture has been midway between the head and the trochanters, the external part of the neck only is removed, the internal portion undergoing very little change. This, at least, is the rule, so far as I have been able to judge from the examination of many specimens in different museums, although I cannot be quite certain that such is invariably the case. Mr. Paget has arrived at the same conclusion, for he says, in the "Pathological Catalogue" of the Hunterian Museum, "that it

appears to be a general rule that that part of the neck of the femur which, after intracapsular fracture, remains connected with the head is not absorbed, as that part is which is connected with the shaft."

This absorption of the neck of the femur appears to be analogous to the rounding of the edges of broken bones to which I have called your attention in speaking of fractures of the skull and other parts. In none of those instances, I grant, does anything take place which is in extent comparable with the removal of so large a mass as the entire neck of the thigh bone, and I can only account for the absorption being so active here on the supposition that it is related to the low state of the nutritive powers of this part of the skeleton; that it is connected, in short, with the same causes, probably of a developmental nature, which lead to the early manifestation of atrophy and other senile changes in this part of the bone. You might expect that absorption after fracture would be most marked in bones whose powers of nutrition are most feeble.

It is a singular fact, for which I can offer no satisfactory explanation, that the absorption affects exclusively or chiefly the part of the neck intervening between the fracture and the trochanters. Possibly this depends upon the pressure exerted by the head of the femur and the acetabulum upon the projecting neck, for it appears to commence about the time when the patient begins to bear upon the limb, though I should say that I have not been able to assure myself of this. In one instance the whole neck was found to be absorbed five months after the accident. The patient in this case was confined on a double inclined plane for only a fortnight, and was not afterwards restrained.

It may happen that the head of the bone is found to be firmly united to the trochanters when the neck has been entirely removed. Such a specimen exists in the museum of the College of Surgeons. The neck of the femur is quite gone, and the head is closely connected with the trochanters by a line of tough compact fibrous tissue. I can readily conceive that this fibrous tissue may in course of time become ossified, and that the specimen described in the "*Medico-Chirurgical Transactions*" by Mr. Langstaff, which is now to be found in the museum of the College of Surgeons, is an instance of such a result. That specimen looks as if the greater part of the neck had been absorbed after fracture, and the head had acquired firm bony union with the trochanters.

It is worth while to remark that, in consequence of the removal of the portion of the neck between the fracture and the trochanters, union, if it takes place at all, is likely to be at the base of the neck, that is to say, close to the trochanters. The want of observation of this fact may have led Sir Astley Cooper and other surgeons to reject, as examples of the reunion of *intracapsular* fracture, some specimens which were probably fair instances of the kind; for although the line of *union* corresponded with the base of the neck, the line of *fracture* might have been nearer to the head, and well within the capsule.

There can, I think, be no doubt that firm bony union of intracapsular fracture may take place under

certain very favourable circumstances. I have already alluded to its occurrence when the broken surfaces are so interlocked from one being driven into the other, that they are maintained in close contact, and no movement between them permitted. Specimen 521, in the museum of the College of Surgeons, is probably an instance of this. The neck of the thigh bone appears to have been broken close to the head, quite within the capsule, the sharp hinder edge of the neck being driven into the cancellous texture of the head, and fixed there. The fracture has been so nearly repaired, that the eye can scarcely discover its line, except in one situation, where a thin stratum of ligamentous structure intervenes between the broken surfaces.

Certain specimens of disease of the head and neck of the femur of rheumatic nature occasionally simulate the appearances presented by reunion after fracture very closely, and have no doubt been frequently mistaken for it. The neck of the bone may become shortened, and the head depressed below its proper level, by absorption on the upper, and deposition of bony matter on the under side, so as to require careful examination to distinguish it from a case of fracture. Again, the neck of the femur affected by this disease is now and then surrounded by a nodular ring of bony deposit, looking very much like the external callus that you might expect to find round an united fracture. I think that an error may be generally avoided, by attention to the following particulars:—In the first place I have told you that external callus is scarcely ever formed around an intracapsular fracture. I do not remember to have met with a decided quantity of it in any one instance. The presence, therefore, of bony deposit around the neck of the femur, rather militates against the probability of fracture. Secondly, in cases of fracture the *head* of the bone undergoes very little change, even in the course of many years. It may become adherent to the acetabulum, or the cartilage may be absorbed, but it seldom undergoes any material alteration in shape. Whereas, in rheumatic disease, the shortening and alteration of the shape of the bone commences in the head, which undergoes absorption on the surface in an irregular manner, so as to lose its rotundity, and become more or less misshapen; and these changes are attended with deposition of bone upon its exterior, which contributes still further to the alteration of its form. Some part of its surface also usually becomes polished from friction; and the acetabulum undergoes corresponding changes, being widened in some directions, filled up in others, and polished in the same manner as the head. I have not seen changes of this sort accompanying fracture. If, therefore, you find the neck of the bone altered in shape and length, as well as in the direction it takes;—if that alteration correspond with the direction in which fracture is liable to occur;—if, at the same time, there be no deposit of bone in the immediate circumference of the neck;—and if the head retains its proper contour, there can, I think, be little doubt of the existence of fracture at some former period.

We occasionally find that a crack has run partly through the neck without traversing it completely;

and it is remarkable that even in such cases the closure of the chink is effected very slowly. In this specimen, for instance, there is a crack traversing the upper and fore-part of the head and neck of the thigh bone, without passing quite through the lower side of the latter. It varies from an eighth to a sixth of an inch in width, and is filled up by tough ligamentous structure.

I have been speaking hitherto of intrascapular fractures, in other words, of fractures situated between the head and the line of attachment of the capsule of the joint at the base of the neck. The bone is sometimes broken in the last-mentioned situation; or the base of the neck may be driven into the spongy structure forming the trochanteric part of the bone, and, being firmly wedged in there, may become united to the cancelli in its new position by fibrous tissue, or by bone. Sometimes it is driven a little further, and splinters the trochanters into many pieces. In short, fracture at this part of the bone may take place in any direction, and the specimens illustrate some of the more frequent varieties. In whatever manner the bone is broken, osseous reunion may take place, callus being formed both around and between the fractured surfaces as in other situations. The latter, however, that is the internal callus, is sometimes very long in its production, and the surfaces sometimes remain for years united only by fibrous tissue. In this specimen of fracture through the base of the neck, the fragments are held together by clasps of bone passing from one to the other, but there is scarcely any direct union between the broken surfaces. Whereas, in this instance, the base of the neck, driven into the cancellous structure of the trochanters without splintering the surface, has acquired osseous connection there, and scarcely any callus has been formed upon the exterior of the bone.

Fracture of the upper part of the thigh bone has occupied much of the attention of surgeons, not merely on account of the several points of pathological interest connected with it, but also from the difficulty which frequently attends the diagnosis of injuries in this situation. The bone is placed deeply, and surrounded by a thick layer of muscles, so that satisfactory information cannot easily be derived from manual examination as in other parts; and, for the same reason, crepitus is not readily distinguished.

In the majority of cases the diagnosis of fracture through the neck of the thigh bone is easy enough. An old person is found, after a fall, to be suffering pain in one hip, with inability to move the limb, or to do more than execute very slight movements; and severe cutting pain is caused when it is handled by another person. The limb appears to be shortened, and accurate measurement proves that it is so, from half an inch to two inches, it may be more or less. By a little extension continued for a time, the limb may be drawn down to the same level with the other, but soon resumes its shortened position when it is left alone. The limb lies on its outer side, and the patient has no power to roll it in. Perhaps, in addition to all this, crepitus is felt by the hand placed upon the hip when an assistant rotates the limb. This is more likely to happen if he first makes extension so as to bring the broken surfaces

opposite one another. These symptoms leave no doubt as to the nature of the injury.

But, unfortunately, any or nearly all of them may be absent, although the accident of which we are speaking has occurred. The shortening, as I have told you, varies, and may not exist at all if there be no displacement of the broken bone. When the fractured surfaces are much displaced, or wedged in together, there will be no crepitus. It now and then happens that, owing to some unusual position of the broken bones or other cause, the limb is inverted; and patients have been known to stand upon a limb, and execute a considerable range of movements, although the neck of the thigh bone was found after death to be broken.

On the other hand, after injury of the hip without fracture, the limb is often found to be useless, everted, apparently shortened, and great pain is occasioned by moving it. The everted position is that into which the limb naturally falls when the muscles of the hip cease to act upon the thigh bone, and the cessation of muscular action may, of course, result from a bruise of the soft parts, as well as from a fracture of the bone. The apparent shortening of the limb, in such cases, depends upon tilting of the pelvis upwards on the affected side, which is a frequent accompaniment of injuries and diseases of the hip. This symptom is likely to deceive you, unless you take some trouble to ascertain, by measurements from the spine of the ilium to the patella or the internal malleolus, that there is no real difference in length between the two extremities. It is important to investigate this point carefully, for if you can clearly make out a difference in the measurement of the two limbs between corresponding bony points, there must be some fracture or dislocation, and the everted position of the toe will, with very rare exceptions, distinguish the former from the latter. You may derive some assistance in a difficult case from an examination of the movements of the trochanter while an assistant rotates the limb. If the neck be entire, the trochanter will revolve round the head as the centre of a circle, but if the neck be broken, it will move in a smaller circle, or may be felt to rotate on its own axis. This, however, is a point requiring some nicety of manipulation; and it is not always possible to be sufficiently certain about the movements of the trochanter to rely on them as a means of diagnosis.

I do not know of any certain rules by which you can decide whether the fracture has occurred within the capsule, at the base of the neck, or through the trochanters. It would be desirable to form an opinion upon this point, if you could do so, with reference to the treatment you would adopt, because in the one case the chances of union are so slight that it is not worth while to run the risk of injuring the patient's health by confinement to bed and the restraint of splints and bandages; whereas if the bone be broken in either of the two latter situations, a hope of firm union may be fairly entertained.

The treatment of fracture of the neck of the thigh bone is to be conducted on the same plan as that of other injuries of the like sort. I think the straight position, with the long splint applied on the outside of the thigh, is, on the whole, more tolerable to the

patient, and better than Earle's bed or the double inclined plane.

In addition to the ordinary circumstances attending a broken bone, there are two other points to be considered, *iz.*, the age of the patient, and the improbability of union taking place. When you have sufficient reason for thinking that the fracture is within the capsule, you will be wise to allow the patient to sit up as soon as the part is sufficiently quiet to admit of his doing so. At any rate you should watch for the intimations of failing health and bed-sores, and have regard rather to the means of maintaining his strength, than to the appliances for securing the position and rest of the fracture. All the directions which I have given you with reference to the diet and general management of elderly persons, who are the subject of injuries, apply with especial force to these cases.

I have told you that the only instances in which bony union of a fracture within the capsule is likely to take place, are those where the broken surfaces are interlocked together. You will do well to bear that in mind in the examination of suspected cases of this injury, because it might happen that rough handling would separate the broken bones, and destroy for ever the only chance of cure.

CASES OF

CONGENITAL DEFECTS OF THE IRIS.

By AUGUSTIN PRICHARD, M.D.,

Surgeon to the Dispensary for the Cure of Diseases of the Eye, in Bristol.

(Read before the annual meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, July 5th, 1849.)

Wishing to bring before the Society one or two rare cases of affection of the eyes, I have chosen as a short and interesting subject, the instances of "Abnormal congested conditions of the Iris," which have come under my own notice. I have access to the records of cases since the first establishment of the Eye Dispensary by Mr. Estlin, in 1812, to the number of forty-eight thousand.

Two cases have occurred out of this number, both of which I saw myself, in which there were no eyes. The lids were thick, but upon being opened there was no trace of any globe visible, nor could any hard substance be felt in the orbit indicative of the existence of the organ in a rudimentary state. I have never had an opportunity of dissecting a subject with this condition, nor of observing it in the adult.

A second congenital defect to which I shall allude is "Absence of Pigment" in the eye altogether. Albinos, or persons in whom there is no pigment in the body, occur in almost all countries, but either they are more frequent in dark-coloured races and hot climates, or they have been more the object of attention when appearing under such circumstances. Blumenbach says that he has seen sixteen cases in Germany. Among the 48,000 cases of diseases of the eyes, only

three have been brought to the dispensary with this peculiarity. It is well known that the *pigmentum nigrum* (or *fuscum*, as it is more appropriately called by many foreign anatomists) consists of cells containing dark granules. The cells are mostly of a very regular hexagonal form in the choroid; they are less regular upon the uvea or back of the iris. Hunter* considered that there was a white pigment in albinos, and Hassall, in his "Microscopic Anatomy," says:—"The pigment cells are stated to exist, but to be wanting in their characteristic coloured contents." I have searched in the choroid coat and posterior surface of the iris in the white rabbit—the only kind of albino I have been able to obtain—and have been able to discover nothing at all resembling pigment or epithelium cells. I have not described the appearance of the eyes; every one is sufficiently familiar with them.

It is now well established that cases have occurred in which the pigment has been deposited after birth; that is, where persons born as albinos have, after a time, ceased to be so. One case is recorded by Dr. Graves as having been seen by Dr. Ascherson; another rather doubtful one was enumerated by Michaelis, in the third volume of Blumenbach's "Medicinishe Bibliothek," and one came under Dr. Graves' notice.

I have been fortunate enough to meet with an example of this change in one of the three cases to which I have above alluded, as having been brought to the dispensary, and it is chiefly with a view to introduce this case, that I bring forward the subject of albinos. The following is an account of it:—

E. S., aged thirteen weeks, admitted June 18, 1845. The irides of both eyes are of a light grey colour; pupils circular, but of a deep red hue. She evidently dislikes the light, and rolls about the eyes continually from side to side. (This restless condition of the eye is peculiar to albinos.) Her hair is white. In the latter end of that year she was again brought. Her irides were blue, but the restlessness and intolerance of light remained the same.

July 21, 1847.—The eyes are of a bright blue colour; the pupil black if we look straight into it, but seen obliquely there is a luminous glare. Eyes still oscillating; sight good; skin much sunburnt. I have seen her again on the 30th of May of this year (1849.) Her hair is getting darker; she bears the light well; the pupils are, however, still a little less black than they are in perfectly natural and healthy eyes; her iris is of exactly the same bright blue colour as that of a younger brother who presents no defects.

I have seen two cases in which, as far as I could make out from the history, there was congenital adhesion between the margin of the pupil and the capsule of the lens (*synechia posterior*). In both the sight was perfect, and there had never been any inflammation in the eyes. A small white point indicated the position of the adhesions. In one case there were two such points, apparently white opacities in the capsule, exactly opposite the margin of the iris, and opposite to each

* Observations on certain parts of the Animal Economy, p. 204.

other. I applied a drop of the solution of atropine, (a preparation useful when you desire to ensure a rapid dilatation of the pupil, but whose effects are too continued to render it in every respect a substitute for belladonna,) and when the pupil was dilated the two white points remained in their original position, with a thin shred of coloured iris running from each of them outwards to the rest of the membrane. In the other case, which I saw soon afterwards, there were three such white points at regular intervals from each other, at the edge of the pupil.

These two cases are of themselves of no practical surgical importance, but there may be instances where a knowledge of the possibility of such a congenital state may be of essential service in the aid of diagnosis and treatment.

Two cases of that rare affection termed "Irideremia," a complete absence of the iris, have occurred, and both within the last few years. In one, brought because it was supposed not to see, when six months old, there was not a trace of iris visible in either eye. The posterior chambers were fully exposed, and presented the red glare round the edge of the lens, which is generally seen in such cases; it had, however, in its left eye, an additional defect, which rendered its appearance most remarkable. This was a central cataract; a central spot of opacity, upon the anterior capsule of the lens, with some slight opacity of the middle of the lens itself. The mother was healthy. The child evidently disliked the light, which was too strong for it, as it had no iris to guard over the quantity of rays to be admitted to its retina. No treatment was adopted. I saw it once afterwards, and it had become more used to the light, but, of course, the condition was otherwise unaltered.

In the other case, admitted in 1847, there was a point of considerable interest. It was an illegitimate child. The mother was healthy, with blue eyes, the servant of the father, who, as she said, had dark but perfect eyes. The child's grandmother, and two of its uncles, (on the father's side,) had very defective sight, and the mother, who seemed a sensible person, stated that their eyes exactly resembled those of the child. In the child there was no iris in either eye, and as, in the other instance, it suffered from the natural consequence,—namely, intolerance of light, and also presented the same red luminous reflection from the deeper seated parts of the eye. I never saw this case a second time. The child was very ill, and apparently wasting; and in all probability died shortly afterwards. The case, however, is interesting in a medico-legal point of view, as I imagine it fixes the paternity, at any rate, upon that family, although of course it does not determine the individual among them who really was the father.

The only other condition with which I shall occupy the meeting is "Congenital Fissure of the Iris," four or five cases of which have been admitted among the 48,000. I have seen one or two cases elsewhere. The state has been termed "Coloboma Iridis," and is a continuation of the pupil from its natural central

position, generally downwards, and a little inwards. Von Ammon, of Dresden, the editor of the *Zeitschrift für Ophthalmologie*, has described the dissection of a case of this kind, in which he found the fissure running back through the ciliary processes and choroid. It is sometimes to be found in both eyes, but according to my experience most frequently in one only. The fissure is sometimes lateral. The following is a very interesting case illustrative of these conditions:—

On the 21st of June, 1820, a woman brought her second child, Ann Hall, when a fortnight old, to the dispensary to consult Mr. Estlin. (I saw nothing of the case at that time, as it was within a few years of my own birth, but in consequence of the peculiar subsequent history, I have referred to the admission book, from which I extract the entries.) It was marked as a case of "Purulent Ophthalmia," coming on the day of birth. There was no discharge when it was brought, but the corneæ were so clouded by opacities, that the pupils could not be seen through them. Some slightly astringent lotion was ordered. The mother has since informed me that there never was any discharge from the eyes.

June 25th, 1820.—"Cornea covered with an uniform dark cloud; no iris or pupil to be seen."

January, 1821.—(The child being about seven months old.) The account adds,—"Sees well; no apparent affection; cornea clear."

The child grew up, was married, and had two children, the second of which was brought in its turn, when four days old, by its grandmother, to the dispensary. The corneæ of both eyes were covered with a dense prominent white opacity; no iris in the pupil visible; no discharge. The eyes had been in this condition since its birth. In about six months these corneæ also began to clear, but very slowly. I see the child continually; he is now six years old, and has a considerable opacity remaining, but he has useful sight.

The condition of the eyes of the mother and the child is the following:—The mother's sight is good; cornea quite clear; the left pupil and iris in a natural and healthy state; in the right there is congenital fissure downwards, the more common form of coloboma iridis. The whole edge of this irregular pupil contracts actively upon the sudden admission of light to the eye.

In the child the right iris is split laterally and horizontally towards the external canthus of the eye, the internal part of the cornea being opaque. In the left eye there is a large central opacity in the cornea, but there is no iris at all. Upon looking into the eye around the margin of the corneal opacity, a red luminous appearance presents itself, similar to that which I have alluded to as seen in other cases of absence of the iris. This last is, therefore, a complex case of congenital and inherited corneal opacity, with fissure of the iris (coloboma) of one eye, and absence of the iris (irideremia) of the other.

Among so large a number of patients, now amounting nearly to 50,000 since the commencement in 1812, (about thirty thousand of which I have seen myself,) there have, of course, been many other cases of con-

genital affections and deformities of the eye besides those to which I have alluded, but I have restricted my notice on the present occasion to those which concern the iris, for fear of occupying too much of the valuable time of the meeting.

CASE OF STRANGULATED FEMORAL HERNIA.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND
SURGICAL JOURNAL.

SIR,—A case of strangulated femoral hernia, which presented an entire absence of several of the customary and characteristic indications of that serious calamity, having lately come under my observation and management, I beg to offer the subjoined description of it for insertion in the *Provincial Medical and Surgical Journal*.

I remain, Sir, your faithful servant,

THOS. HENRY STARR, M.D.

Leamington Spa, July 19, 1849.

I was sent for on Sunday afternoon, June 10th, to visit Miss Lefanu, a maiden lady, aged 58, residing in this town. I found her suffering from what, at first, appeared to be an ordinary bilious attack, to wit:—She complained of incessant nausea, and had vomited during the night and fore-part of the day a considerable quantity of greenish matter, which she said had a bitter taste. The tongue was loaded with a white creamy fur. There was much thirst, and frequently recurring severe pain in the epigastrium and right hypochondrium, the latter being not dissimilar to that which occurs during the passage of gall-stones. The pulse was slightly accelerated, but otherwise preserved its natural tone, being neither hard nor full. The countenance seemed flushed, in short, the symptoms taken collectively, denoted a moderate state of feverish excitement. The bowels had not been relieved since Saturday morning, and then but imperfectly; they were, moreover, subject to habitual constipation.

I laid my hand upon the abdomen, and found it singularly soft, and *free from distension*, whilst tenderness was in no degree, either directly or indirectly, referred to the seat of the hernia, indeed my attention was in no wise attracted by my patient to the existence of such a contingency.

I ordered a mustard cataplasma to be applied to the epigastric region, and prescribed a pill, with five grains of calomel, to be taken at once, and in the course of two hours to be followed by a draught of infusion of roses, with half an ounce of sulphate of magnesia, and half a drachm of tincture of henbane.

Monday, June 11th.—On seeing Miss Lefanu this morning, I found she had passed a very restless night, and although the medicine was apparently retained, at all events, for an hour or two, the bowels had not been acted on. The nausea was at this time unremitting, and the vomiting occasional. The pulse and the other symptoms were much the same as they were the day before.

On making a more searching examination, I detected

a somewhat inelastic circumscribed swelling, between two and three inches in diameter, at the summit of the right thigh, and rising, as it were, on the abdomen over the edge of Poupart's ligament. I instinctively came to the conclusion that I had to deal with a strangulated femoral hernia, although I found a total freedom from local pain or tenderness, as also from abdominal distension, indeed the general bulk and surface of the abdomen were peculiarly compressible, whilst pressure there created no uneasiness whatever.

Having made several essays at the taxis without success, and foreseeing the probable necessity for an operation with the knife, I requested my friend Mr. Burke, an able surgeon in this place, to see the case with me. After a careful examination of the tumour, Mr. Burke expressed his belief in the existence of a hernia, but at the same time was, like myself, not a little puzzled to account for the complete exemption from tympanitic distension, and local pain or tenderness. His attempts to reduce the rupture were conducted with skilful 'nicety in reference' to the direction and anatomical relations of the parts. He persevered for at least half an hour, and made use of as much force as was compatible with safety to the structures implicated. His efforts, nevertheless, proved as fruitless as those I had previously made.

A copious enema of thin gruel and castor oil was now administered, after which we directed eight leeches to be applied to the swelling, these were succeeded by the apposition of a bladder of crushed ice to the part affected. All these expedients were unattended with the wished-for result; and the taxis was repeated, but without advantage.

It was now getting late in the evening, and as our patient, apart from the nausea, seemed to suffer merely from occasional epigastric uneasiness, and otherwise evinced no signs of exhaustion, we deferred operating until the next day, thereby giving her a further chance, (though a faint one,) for the reduction of the hernia, without having recourse to the knife. This delay would not, I conceive, have been justifiable, if symptoms of active inflammation had been present, but the peculiarly sluggish character of the case, as the event proved, quite sanctioned our decision, and tended also to show that in pathological science, as in other branches of human knowledge, there is no general rule without some exception.

As for the employment of the infusion of tobacco, I cannot but express my unqualified reluctance to such a step, being strongly of opinion that by the poisonous prostration which it occasions, if it sometimes promotes the reduction of hernia, it more frequently impairs the powers of life without that effect, and so tends to prevent the successful progress and issue of the surgical operation. I may likewise remark, that although Sir Astley Cooper was inclined to favour the tobacco enema, he distinctly says in his lectures, that "its effect in hernia depends much upon whether the hernia is situated near muscle or tendon;" and adds:—"In femoral hernia, which is covered before by a strong fascia, and where there is a hard bone resting against it posteriorly, the tobacco has not the same effect as in umbilical or inguinal hernia."

When we visited our patient on Tuesday morning, June 12th, we found her, considering the critical nature of her position, wonderfully composed. She had had some short intervals of sleep. Of food she had taken none, but her thirst was insatiable, and she drank plentifully of toast-and-water, with now and then a little tea. The seat of the hernia was still free from pain or heat, whilst the abdomen remained soft, and without tenderness or distension; nevertheless the nausea was unabated, and vomiting of a dark brownish fluid, with small flocculent masses floating in it, but having no stercoraceous odour, returned at longer or shorter periods, being accompanied with much pain and distress throughout the epigastric region, with the sensation described by Sir Astley Cooper "as if a cord were bound tightly round the upper part of the stomach." The pulse now began to flag.

We judged it very desirable to have another consultation, including a third professional opinion, before performing the operation, pregnant as it needs must be, at all times, with great hazard and responsibility, I accordingly called upon Mr. Male, the intelligent house-surgeon at the Leamington Hospital, who most obligingly rendered his assistance and promptly proceeded with me to examine the case. The result of his investigation was that he entirely coincided with us in our views; but in consequence of the rather embarrassing anomaly of an absence of local pain and tympanitic distension, he, with my cordial approval, brought in Mr. Pritchard, whose opinion differed in no way from that we had previously formed. He, like the rest of us, was surprised at the non-existence of certain usual symptoms, which I have already sufficiently dwelt upon.

Relying upon the strength of existing symptoms,—namely, the swelling, the distressing sickness, the epigastric uneasiness and tension, with the obvious intestinal obstruction, and though last, not least in importance, with the unhesitating consent of the lady herself, the operation was commenced.

The patient lay on a mattress, placed on a table before the window, the head and shoulders being raised and supported by pillows, whilst the legs were suspended from the lower edge, so as to give an adequate degree of tightness to the integuments. Mr. Burke made a free crucial incision over the centre of the tumour, carrying the scalpel, in the first instance, from above obliquely downwards and outwards, and then crossways almost at right angles with the first incision. He next divided the superficial fascia, and raising the hernial sac with the forceps, scratched an opening into it with the point of the knife. There was scarcely any fluid in the sac. Upon enlarging the aperture with the probe-pointed bistoury and director, a solid mass of omentum presented itself in the foreground, having a lobulated form, and being as large as a middle-sized walnut. On turning this aside, a knuckle of intestine, considerably distended and dark in colour, apparently from venous congestion, came into view. Although the case betrayed at this juncture, a composite character, we now had ample evidence before us, in addition to its history, to prove that the

epiplocele was of longer standing than the enterocele, the former being fixed by somewhat old adhesions, and without traces of present inflammation, whilst on the other hand the intestine was free and evinced recent inflammatory action, though in a slight degree. The gut was most effectually incarcerated by the conjoint agency of the associated omentum, and the fibrous and bony structures of the crural arch. Mr. Burke severed the stricture with great skill and address, after which he readily returned the gut into the abdomen. We deemed it prudent, on account of the adhesions it had contracted, and its otherwise altered condition, to leave the omentum as we found it. The edges of the wound were kept together by suture, and the cold water dressing applied.

It is but fair to state that Miss Lefanu underwent the operation with heroic fortitude, and gave proof positive that courage and resolution are preferable to chloroform and all other anæsthetic agents. The nausea and vomiting which had persisted up to the moment of the operation thereupon ceased, and in the course of twenty minutes after we left the house the bowels were copiously and forcibly evacuated. About a week after the operation Miss L. was troubled with hæmorrhoids, which bled a good deal, but yielded in a few days to a mild laxative treatment, with mineral acid and the application of the Unguentum Gallæ. She had been subject to this complaint on former occasions. The issue of the case has proved perfectly satisfactory, and Miss L. is at this time, July 18th, quite well. She wears a truss, the pressure of which may ultimately cause absorption of the omental tumour.

REMARKS.—I have thought this case worthy of being recorded for several reasons,—firstly, because of the non-existence of certain normal signs of strangulated hernia; and secondly, because of its composite character. I learnt that a few months prior to the occurrence which I have related, Miss Lefanu had fatigued herself by an unusually long walk, soon after which she was seized with a sudden and violent pain in the right groin, and on her directing her observation to that part, she says she discovered a small swelling. The pain gradually subsided, yet the swelling remained; but as it afforded her little or no inconvenience, she treated it with indifference. It appeared from the account I received, that the original tumour just referred to, was not above one-fourth the size of the hernial swelling, as it came under my notice, on the 11th of June last; there is every reason to suppose, therefore, that the rupture when it first took place, was entirely of the omental kind, and that from neglect it became irreducible. On inquiring minutely into the circumstances, it was quite clear the increase of size took place suddenly whilst straining at stool on Saturday, June 10th. Finally, I am of opinion that the pre-existence of the epiplocele was instrumental in rendering the return of the enterocele impracticable without the aid of the knife.

CASE OF BRONCHOCELE,

OBSTRUCTING RESPIRATION, CURED BY A SETON.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND
SURGICAL JOURNAL.

SIR,

Having seen a case of bronchocele mentioned in your Journal a few months ago, which proved fatal from obstructed respiration, I have thought it possible that the following case, which occurred in my practice not very long ago, may be of sufficient interest to be worth recording; if you think so, I shall be obliged by your inserting it in the *Provincial Medical and Surgical Journal*.

I am, dear Sir,

Yours faithfully,

RICHARD HEY.

York, July 18, 1849.

CASE.

Miss M. G., aged 21, had suffered from early infancy from bronchocele. The gland, by its gradual enlargement, had diverted the larynx to the right of the median line, and the thyroid cartilage was to be felt somewhat prominently, and forming, to a certain extent, an angular projection towards the right side. While, however, the deeper-seated portions of the gland appeared to have enlarged more towards the right, the more prominent external expansion of the glandular tissue was most observable on the left side of the neck. The tumour at the period of the operation was firm and resisting. The pressure on the larynx produced by the tumour had for a considerable period so far interfered with respiration, that the breathing became very noisy on the slightest exertion, even walking across the room quickly would produce this; and the respiration was more or less audible at all times. For a considerable time past there had been much confusion on first awaking in the morning, the blood being apparently so imperfectly decarbonised during the interval of diminished respiration caused by sleep, that it did not afford the requisite stimulus for the performance of the healthy functions of the brain, until again the respiratory efforts had been for a certain period increased by the agency of volition. Such was the ordinary condition of respiration. But it so happened that we had an opportunity of observing it under the influence of disease. And this was a strong additional inducement for using every available means to get rid of the tumour whilst constitutional vigour remained in force.

About two years before the operation the young lady suffered from an affection, having the closest resemblance to a (second) attack of whooping cough, which, in fact, she seemed to have received through inoculation. She, along with two other young persons, were vaccinated with matter taken from a child suffering from whooping cough, and all three became the subjects of severe cough, having all the characters of that complaint.

The young lady, whose case is recorded, suffered so

severely during the progress of the cough from difficult respiration and extreme feebleness of the circulation, dependent apparently on interrupted or rather obstructed pulmonary circulation, that considerable fears were at one time entertained for the result. Under these circumstances, considering the increased liability to pulmonary attacks, and the impaired power of resisting disease in those organs, it became necessary to make every possible effort to disperse the tumour.

Change of air and various medicines were employed, which had a tendency to improve the general health. Iodine externally and internally was made use of, and persevered in for months; also galvanism was fully tried, all to no avail. No perceptible impression was made in the size of the gland, and the interference with the ordinary respiration seemed rather to increase than to diminish. At this period I was consulted in the hope that the patient might be relieved by surgical operation, and after due consideration I resolved to insert a seton through the substance of the gland. The patient was placed under the influence of æther.

I passed a skein of silk through one half of the gland, commencing at the upper part in the median line, and taking, as nearly as possible, a semicircular direction, and brought it out at the corresponding joint below, thus embracing half the tumour, and from three quarters to one inch deep, so that the seton was fairly established in the substance of the gland. The patient did not appear conscious of any pain during the operation; and there was no hæmorrhage of the least consequence.

For the first five weeks after the introduction of the seton, no material change took place; the discharge was slight, and it was found necessary to use the savine ointment, which had the effect of increasing the discharge, which was healthy pus.

Some time in the course of the sixth week after the introduction of the seton, the patient began to suffer from a feverish attack, which was prevalent. On the third or fourth night after this fever commenced she was seized with a cough of the most distressing character, which harassed her extremely. In consequence of being unable to expectorate, which had always been the case latterly when suffering from cough, the oppression was urgent, and the head soon became affected, apparently in the imperfect arterialization of the blood. The patient became delirious, and the tongue brown and dry. This condition continued about forty-eight hours, during which interval the seton had begun to discharge a thin dirty-looking, and most offensive matter, in great abundance, which in a short time relieved the irritation about the windpipe, and the delirium then very much subsided. This discharge from the seton continued most profuse for more than a fortnight, it being necessary to apply fresh dressings every two or three hours.

During the third week from the operation the discharge began to diminish, and towards the end of it it seemed to lose its highly offensive smell, and to assume a more healthy character. There was never any appearance of sloughing, nor any indication of very active inflammation in the thyroid gland. The debility consequent upon this state of things was very

great, but the convalescence, though prolonged, was ultimately complete.

As soon as the fever disappeared, and the discharge from the seton began to assume the appearance of healthy pus, the absorption or dissipation of the gland, which, as I have observed, had previously not been very marked, made rapid progress, and by the time the strength was re-established almost all vestige of enlargement had disappeared. I have allowed some time to elapse since writing the above, and am enabled to say that the cure is perfectly satisfactory, and the relief most grateful to the patient.

REMARKS.—There is nothing new in this operation, yet I think it scarcely meets with that attention which it deserves—at least I have myself never before seen it resorted to. Any of your readers who may be interested in the matter will find several cases detailed in the *Transactions* of the Royal Medical and Chirurgical Society. Although the operation was known at least a century ago, yet Dr. Quadri, of Naples, seems to have revived it, and practised it to a considerable extent about the years 1817 and 1818. Mr. Copland Hutchinson, in 1819, also tried it in some instances; Mr. A. T. Thompson and others have also adopted it, the general result of which seems to have been favourable. Mr. C. Hutchinson observes:—

“Upon the whole the operation by seton in bronchocoele is not, generally speaking, to be considered as dangerous, when performed by a judicious surgeon, well acquainted with the anatomical structure of parts, but in delicate and irritable habits, and in the hard lobulated species of the disease, some circumspection is to be observed; and, indeed, in such constitutions a cautious practitioner would well weigh the necessity of operating at all, unless the symptoms of suffocation and impeded deglutition became urgent. In some cases recorded, the danger from hæmorrhage seems to have been much increased from using a common seton needle. In order to escape such a contingency, I had a curved trochar made, and fixed in a handle, grooved like a lithotomy staff, with an eye behind the shoulder; then, threading this with a single silk, to which a skein was attached, I passed the trochar in the manner already described, until I could get hold of the single skein; I then withdrew the trochar, and with great ease drew the skein through the canal thus formed.

UREA DETECTED IN THE RICE-WATER EVACUATIONS OF CHOLERA.

By HENRY JOHNSON, M.D., Shrewsbury.

a About two or three fluid-ounces of the rice-water evacuations of a man, ill of cholera, were evaporated to dryness in a steam bath.

b Distilled water heated to 200° Fahrenheit was poured upon the dry mass (a) broken up, with a spatula, and the mixture was digested in a steam bath for about half an hour.

c The digested fluid (b) was filtered, and the filtered

fluid was evaporated again to dryness in a steam bath, and the residue digested with a considerable proportion of absolute alcohol, at a greater heat, for half an hour.

d The digested liquor (c) was again filtered, and the liquor evaporated to dryness.

The dry mass (d) was now dissolved in a small portion of warm distilled water. It was concentrated by evaporation to the consistence of a thin syrup, and a few drops of nitric acid added. A slight effervescence took place, and having been set aside to crystallize, the next morning I saw distinct long crystals, which could be nothing else but *nitrate of urea*.

The foregoing process is that given by Dr. G. O. Rees,* for the examination of blood supposed to contain urea.

I have good reason to believe that no urine was passed with the evacuation now examined. The man from whom it was procured was at the time in the early stage of the disease, and had suppression of urine, and was not known to pass any until a day or two afterwards. I determined, however, to repeat the experiment, and I therefore sent to a union workhouse in the neighbourhood, where the cholera was still raging, to procure another specimen of the rice-water evacuation, requesting that every precaution might be used to obtain it in the proper stage of the disease, and free from admixture.

The same process was followed with this second specimen, and I obtained a fluid which, on gentle evaporation, after the addition of nitric acid, deposited abundant crystals; these appeared under the microscope as beautiful “thin rhombic plates,” but the acute angle was not “replaced by a small plane,” as described by Ragsky.†

There is, therefore, I think no doubt that *urea* is contained in the discharges from the bowels in cholera patients, at a time when the secretion of urine is suppressed, or I ought rather to say, retained. I believe that this is a new fact, at least I can find no printed record of it in any work to which I have now access.

Professor Simon‡ says that urea has been discovered by four chemists in the *blood* of cholera patients, but he makes no mention of it in the evacuations.

Dr. Watson,§ after remarking the freedom of cholera patients from coma, when the urine has been retained for several days, says,—“Was the urine here drained off from the blood in the enormous and unnatural flow from the stomach and bowels? I think it probably was, but I do not know that any chemical search was ever made for that substance in the fluids so effused.”

These notices I have found since my experiments were made, at which time I was not aware that any one had even conjectured the existence of urea in,

* Analysis of blood and urine, p. 38.

† Dr. Ranking's “Half-Yearly Abstract,” vol. ii., p. 356.

‡ Animal Chemistry (Sydenham Society's edition,) vol. i., p. 49 and 325.

§ Lectures, vol. ii., p. 552.

what appeared to me, a very unheard-of locality. The fact appears to me curious, and deserving of being recorded, if only for the sake of leading to further investigation. I have at present no opportunity of pursuing it further, as the cholera is subsiding in this neighbourhood.

September 7, 1849.

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER THE TREATMENT OF PROFESSOR SANDS COX, F.R.S., SENIOR SURGEON TO THE HOSPITAL.

Reported by Mr. PETER HINCKES BIRD, late Resident
Medical Officer.

CASE XXVI.

WOUND OF THE RADIAL ARTERY.

Michael Dent, aged 40, a carman, was admitted under the care of Professor Sands Cox, on the evening of July 12th, 1847. It was stated that he put his arm through a window, and severely cut himself. He bled profusely at the time, and went to a surgeon, who put on a tourniquet as a temporary expedient. He was intoxicated at the time the accident occurred.

On admittance his left fore-arm presented several lacerated wounds, one of which was to the outer side, at the junction of the middle with the lower-third of the radius, over the course of the radial artery. On loosening the tourniquet a gush of blood took place, evidently from the radial artery.

Treatment.—The brachial artery having been compressed; the wound being a very small one, was enlarged, and the artery exposed; it was found to be torn, but not completely divided. A ligature was applied above and below the wound in the artery, and the vessel divided between the ligatures. After waiting a short time, and no fresh hæmorrhage having occurred, the wounds were dressed, and the patient put to bed. He was extremely weak, having lost a large quantity of blood previous to his admittance. Pulse very small; countenance pale; the skin cold and clammy. A draught containing spirit of ammonia, together with some wine, were administered. The arm to be kept cool with the spirit wash. Warmth to be applied to the extremities.

13th.—No return of hæmorrhage; he feels better, but is very weak from loss of blood; pulse 96, weak and compressible.

17th.—Recurrence of hæmorrhage, apparently from the lower end of the artery; easily stopped by the application of the tourniquet over the brachial artery, and the application of cold.

20th.—Both ligatures came away.

24th.—Wound quite healed. Discharged.

REMARKS.—The above instance of wounded artery well exemplifies the practice to be adopted in such cases. When an artery is merely cut or torn, but not

completely divided, it is in the same state with regard to hæmorrhage as if it had given way by ulceration. It can neither retract nor contract, and unless pressure can be accurately applied, will continue to bleed until the patient is destroyed. The practice to be pursued is to divide the vessel, if it is a small one, such as the temporal artery, when it will be able to contract and retract, and the bleeding will soon cease. If an artery of larger dimensions be wounded, a ligature should be applied above and below the wound, and the vessel may or may not be divided between them, at the pleasure of the surgeon.* In all hæmorrhages from arteries the ligature alone is to be depended upon, and it may be laid down as a general rule that each extremity of the wounded vessel should be tied as near as possible to the wound in its walls.

The necessity of tying both ends of a wounded artery is evident from the fact that the anastomoses in all parts of the body are so extensive, as to furnish a supply of blood, which may pass through the lower extremity of the wounded vessel in a sufficient stream to produce an alarming, and in some instances, a fatal hæmorrhage.

In the above case secondary hæmorrhage occurred about the fifth day. It most probably came from the lower end of the artery, the upper extremity of the vessel being closed by the natural processes.

Mr. Guthrie has observed that the lower end of a divided artery is more prone to secondary hæmorrhage than the upper, and his observations lead him to conclude that nature adopts for its closure a process different from that for the upper end; that the retraction and contraction of the lower end of a divided artery is neither so perfect nor so permanent as at the upper end; and that the internal coagulum is in many instances altogether wanting, or very defective in its formation, giving rise to a very different result from that which is observable in the upper divided end of the same vessel.

PROVINCIAL Medical & Surgical Journal.

WEDNESDAY, SEPTEMBER 19, 1849.

A question in connection with cholera, of high interest at the present time, especially in those localities which have hitherto been spared, or which have but recently been visited by the pestilence, is that of the propriety of forming special establishments or hospitals for the reception and treatment of cases.

The opponents to cholera hospitals object to such establishments, on the supposition that if cholera be propagated by contagion, the accumulation of patients intensifies the poison to a degree which is not only detrimental to the patients themselves, but which has the effect of

* See "On Diseases and Injuries of Arteries," by Guthrie, p. 253.

forming a nucleus whence the disease may spread in a locality to which, but for the voluntary transportation of the sick, it might never have arrived. This may, at first sight, appear a strong argument, and we are willing to admit its validity in reference to diseases whose contagious character, as in the case of typhus, scarlatina, &c., is well defined and energetic; but, as regards cholera, we are not disposed to go the same length, for, taking it for granted, which we do, that cholera is contagious, it is clearly not so in an intense degree, and it would appear to assume this character more especially in the dirty and ill-ventilated districts from which it is the main object of cholera hospitals to extricate those who become its victims. If the experience of the last visitation of the disease, in 1832, is to be taken as any criterion, the objection to such hospitals are still further negatived, for neither was the mortality within their walls higher, than was observed among patients treated at their own residences, nor were there, in any instance with which we were acquainted, grounds for believing, that through their agency, the disease was imported into districts previously free. The objection which some have stated, that the act of removing a cholera patient is in itself attended with risk to his life, we hold to be, entirely without foundation, if such removal be effected with the precautions which were adopted in 1832.

In favour of the establishment of cholera hospitals, there is, on the other hand, much to be said. In the first place, the mere fact of withdrawing a cholera patient from the filthy and ill-ventilated abode in which he has been attacked, must not only offer, on hygienic principles alone, to the patient himself a better chance of recovery, but must in so far subtract a source of pestilence from a locality in which there is everything to favour its diffusion. As a preventive measure alone, we are, therefore, strongly disposed to advocate the measure in question.

But it is in reference to treatment that the advantages of cholera hospitals are especially manifest. Who will say that the management of so severe a disease can be as properly undertaken in a small and in every way inconvenient apartment, surrounded by numerous necessary as well as unnecessary occupants, without a fire place perhaps, and destitute of clothing and food, as in an establishment where all the required means and appliances have been carefully

provided? Who, that has had much experience of the poor, can depend upon the by-standers or friends, for a punctual attendance to medical instructions even if they are capable of comprehending them? The apathy of the poor in respect to the exhibition of medicines, unless a positive and rapid benefit is observable, is proverbial, and though the loss of a few hours from such ignorant hopelessness may not be of vital consequence in many diseases, in cholera it is fatal, and there is on this account the more necessity for the services of hospital nurses, on whom we can depend for the implicit fulfilment of our therapeutic directions.

But let us take another view of the question: No one will we presume deny, that success in the treatment of a disease so rapidly fatal, must depend much on the assiduity—nay, constant watchfulness of the medical attendant. Is it fair we would ask, that he should be expected to spend hours in a pestiferous atmosphere, beside the squalid pallet of the still more squalid patient, thus immeasurably increasing his own personal risk, with the conviction nevertheless, that much of his usefulness is neutralized by the unfavourable circumstances by which he is surrounded? Few there are, we conceive, even of the strongest non-contagionists, who would not if they had the option, shirk such doubtful relations with the victim of cholera. The believer in contagion must feel but too keenly, that in his mission of charity, he is exposing his life, and the prospects of his family to contingencies which ought not to be demanded of him. True, it is, that many cases of the disease must be thus treated, and the health and life of the practitioner must be thus put in jeopardy; but there is no valid reason why, in as far as possible, the dangers attendant upon his calling, should not be removed or mitigated. That cholera spares not our profession we have had but too many melancholy instances; it is a duty which the public owes to our self-sacrificing fraternity for the willingness with which we face the dangers from which another profession, whose duty is equally stringent, does not hesitate to abscond, at least to see that as far as lies in its power, we should not be sufferers by our humanity.

A letter has been received by the Central Council from Dr. Brown, of London, calling their attention to the grievance so long com-

plained of by the Assistant-Surgeons of the Navy, and lately perpetuated by an Admiralty order, dated February 1st, 1849, which, without assigning them a separate berth, continues their exclusion from the ward room, to the degradation of the profession, and as we think, the injury of the public service.

The object of that letter was to call upon the Council to exert their influence with the members of the Association, in the different districts, by recommending that petitions to both Houses of Parliament for a redress of their grievances, should be signed as extensively as possible, and presented in the next session. The letter was accompanied by a pamphlet, entitled "An Exposition of the case of the Assistant-Surgeons of the Royal Navy," by Dr. McWilliam, which—as setting forth the case clearly and impartially—we recommend to those who are not already in possession of its merits. But from the nature of the grievance,—from its long existence,—from the numerous petitions already presented,—and, from the frequent expression of the opinion of the medical and general press, it was conceived, that except at an annual meeting, the subject was not one for the interference of the Council in the manner proposed. At the same time we were requested by the Council to express their strong aversion to the continuance of this indignity, which, while it degrades the individual by lowering him to the level of the boy of fourteen, inevitably retards his becoming an efficient officer of the public service, from the impossibility of continuing those studies, so necessary to enable him to keep pace with the march of improvement in medicine and the collateral sciences.

But where petitions fail, the remedy must lie with the profession itself. Nothing is more clear than that assistant-surgeons are required by the service; and if no candidates present themselves for the office, the Admiralty must soon find suitable accommodation for those who have a right to claim it. Let this be impressed strongly upon all who are now fixing upon their future plans; let it be recollected that nothing can compensate a man for the annoyances to which he is subject in the cockpit; the irritation of mind and body from the practice of school-boy tricks by the midshipmen, upon the unfortunate object of their playful propensities, and the want of society adapted to their habits and education, speedily lead to a degree of mental degradation which, in many instances,

has gone on till the unhappy sufferer has terminated his existence by suicide, or has perhaps ended his days in a madhouse.

It is difficult to conceive how a medical man, with any self respect, can enter the service while this degrading practice is continued; and though we would do our utmost to remove the stigma, we cannot feel that commiseration for the man who voluntarily submits to it by accepting the commission, which we should do under other circumstances.

This is not a parallel case with that of the Poor-Law medical attendant, who must either take office with the full knowledge that he is about to give his time, his talents, and his health, for an inadequate remuneration, or submit to the competition of a rival; but here the candidate offers himself voluntarily, and with his eyes open to the degradation he will incur; and we can only pity the individual for the absence of that self esteem which ought to inspire every man who practises a liberal profession.

Reviews.

Pathology of the Human Eye. By JOHN DALRYMPLE, F.R.C.S. London: John Churchill. Fasc. I. and II.

There is no class of diseases to which the human frame is liable so difficult to recognize by mere description, as those to which the eye is subject; minute shades of difference in appearance, which if once seen, are never forgotten, afford the means of diagnosis between two affections perhaps requiring totally distinct methods of treatment. Hence arises the greater necessity for a demonstration of the diseases of the eye, than of those affecting any other organ, excepting perhaps the skin. Unfortunately it happens, that though there are special hospitals devoted to the cure of ophthalmic diseases in the London and provincial schools, yet the time usually devoted to their studies by medical pupils is so taken up by the attendance on lectures, &c., which are required by the authorities, that the study of diseases of the eye is almost totally neglected, and the young surgeon commences practice with everything to learn in this department of his art.

To remedy this defect, Mr. Dalrymple has undertaken the task of publishing a series of illustrations of the pathology of the human eye, omitting those of which no idea can be given by the pictorial art, such as amaurosis, &c. But so difficult is it to copy with the pencil the minute shades of departure from a healthy state, which constitute these diseases, that on the announcement of his prospectus we certainly despaired

of his success, and nothing but actual inspection could have persuaded us that it is possible to imitate these changes of structure so faithfully as to be of real use to those who have not previously seen the disease in question.

The two Fasciculi already published are certainly wonderfully accurate in all their details, and though we have been peculiarly conversant with this branch of our art for many years, we should be at a loss to detect the slightest deviation from the appearances presented in the living eye. The five first plates comprise the pathology of the appendages of the eye, and for beauty and fidelity of coloring have never been surpassed. We think that no one who referred to them, on inspecting a case of pterygium for instance, for the first time, could fail to recognize in the third plate of the first Fasciculus, a *fac simile* of the particular disease which he has under his notice. The fourth plate also, giving a representation of hordeolum and tumors of the tarsus, is equal to nature itself as a means of instruction in ophthalmic surgery.

In the sixth plate, Fasciculus second, the distinction between simple conjunctivitis and inflammation of the submucous cellular tissue is so beautifully drawn, that it must be seen, in order to be fully sensible of the difference between the description by the pen, graphic though it may be, and that afforded by the pencil. To the plate itself we must refer our readers for the latter mode of illustration, while we insert the description given by Mr. Dalrymple, as a good specimen of the letter-press department:—

“The arrangement, however, of the vessels of the conjunctiva differs materially from those of the submucous and fibrous tissues; and when the former membrane is actively injected, the network presented consists in a beautiful display of tortuous vessels, anastomosing freely with each other, and gradually assembling in straighter and more uniform groups as they approach the margin of the cornea. The larger trunks that seem to feed this vascularity, appear to arise from the points where the conjunctiva oculi becomes reflected from the palpebral lining, and one or two assemble from each angle of the eye, particularly from the membrana semilunaris at the inner canthus. If the finger be rubbed against the eye, through the intervention of the lids, the network of vessels will be made to slide over the clear white structures beneath, and we shall then be conscious of the redness or inflammation being limited to the superficial membrane.

“Such a condition of simple conjunctivitis is represented at Fig. VI., and if an eye in this state be further examined with a moderately deep magnifying power, those vessels which appear to terminate at the extreme margin of the cornea, will be found to branch off in loops, and to return to inosculate with others approaching in a similar direction. The conjunctiva lining the lids, especially the lower one, is generally very vascular, in many instances presenting a highly villous appearance, and exhibiting all the characteristics of a well injected mucous membrane. Such is the true type of simple conjunctivitis.

“When, however, the inflammation commences, as in Fig. V., in the fibrous membrane, that forms the boundary fascia between the conjunctiva in front and the sclerotic below, the arrangement of the vessels is very different. There exists in the submucous tissue a considerable proportion of cellular or filamentous, as well as fibrous, membrane, and the vessels of these structures run in more uniform and straighter lines towards the circumference of the cornea; as they approach the latter body, they divide frequently, and inosculate under sharp angles, so that when freely injected by inflammation, a zone of red and exceedingly minute vessel is seen encircling the cornea. The tint of the zone is usually pinkish, and somewhat faint, contrasting with the more superficial and strongly-coloured conjunctivitis.”

On the Extraction of Teeth: with an Account of a much less painful mode of operating. By HENRY GILBERT, M.R.C.S., &c. London: H. Renshaw, 8vo, pp. 66.

This is a treatise on a subject interesting to us all, since we all, at some period of our lives, have occasion to submit to the operation which Mr. Gilbert proposes to render less painful, by a new apparatus which he has lately introduced. The intention of his chair, with the attached bar and fulcrum, is no doubt in accordance with the grand desideratum in the dentist's art, so well laid down by John Hunter, viz., that “It would be best of all to attempt the extraction of a tooth in the direction of its axis;” but we are afraid that, though at first sight it may appear that the fulcrum takes off the pressure of the forceps from the adjacent teeth, yet that in reality this is not the case, for the reasons which will be presently given. We extract from Mr. Gilbert's book his own description of the chair and fulcrum as follows:—

“The chair which I use is an ordinary easy chair, with a back that can be inclined to any angle, the top of which is semi-cylindrical, for the reception of, and to enable the operator to come close to, the head of the sufferer. At the right hand side of this chair there is fixed a strong steel bar or stem, on which again there is a socket capable of sliding on it, and of being fixed at any required height by means of the set screw, which, on being turned, presses the piece against the stem. The moveable bar, which is thus capable of being raised or lowered at will, holds another piece of steel, or arm, placed horizontally to the chair, which again holds a third piece of metal, the latter being the fulcrum on which the extracting instrument rests.

“The teeth are extracted by means of the ordinary forceps, adapted to the fulcrum, in the following manner:—The operator first causes the person to recline back in the chair, and adjusts the bearing, so that it will come between the jaws (when a back-tooth is to be extracted); he then takes hold of the tooth with the forceps, which will rest on the bearing, if a lower tooth is to be extracted, and by moving the

forceps upon the bearing as a fulcrum, he lifts the tooth out of the lower jaw. If a tooth is to be extracted from the upper jaw, the forceps are introduced below the bearing, and act so as to draw the tooth downwards out of the jaw. The bearing and sliding piece should be covered with any soft fabric or substance. By these means teeth can be drawn, in accordance with John Hunter's directions, perpendicularly, or in the direction of their axis."—p. 62.

To any one who understands the commonest laws of mechanics, it will be at once apparent, that in raising a lower tooth, for instance, out of the socket, as proposed, the jaw is forcibly pressed against the under side of the fulcrum, and the amount of injurious pressure is just as great as it would be if the fulcrum were loose in the mouth, as in the old pelican elevator. Indeed we are inclined to think that the injury may be greater, since in Mr. Gilbert's fulcrum, no adaptation can take place to the surface of the teeth, but some one point must receive all the pressure required, whilst the fulcrum afforded by the pelican, adjusts itself so as to take its bearing from all the available points, and is consequently not so likely to prove injurious, either by damaging the crowns, or producing inflammation of the sockets.

We are decidedly of opinion that in the majority of cases the sound adjacent teeth are exposed to injury from the pressure of any fulcrum, which can be used against a power sufficient to raise the tooth out of the socket, for it is quite evident that if you lift the tooth the jaw either goes with it, or is prevented doing so by some antagonistic force, and as that force cannot be applied to the soft parts, its application is limited to the teeth themselves as in both the instrument of Mr. Gilbert and the discarded elevator.

Should these opinions be practically falsified, no one will rejoice more than ourselves, but after very mature consideration of the subject, we cannot conscientiously recommend the apparatus to our readers, although we are fully sensible of the great advantage of the principle, if it could be satisfactorily carried out.

INQUIRY ON CHOLERA.

In compliance with the resolution passed at the annual meeting held at Worcester, the annexed questions have been carefully framed, and it is earnestly requested by the Council, that the members of the Provincial Medical and Surgical Association will assist in this laudable purpose, by forwarding as full and complete a series of answers as possible, to Mr. Hunt, 26, Bedford Square, London, who has kindly undertaken the inquiry.

CHARLES HASTINGS,
President of the Council.

QUESTIONS.

1. During the prevalence of the epidemic, has your own neighbourhood, town, or district, been exempted

from the visitation? If so, can you mention any local circumstances, which may account for the exemption? Was the district healthy during the visitation of the cholera about the year 1832, and did circumstances then exist which may be supposed to have protected it?

2. If the cholera* has appeared in your district, how many cases have you seen; how many of these have been fatal?

3. When did the disease break out, and how long did it prevail? Please to state generally whether many persons were simultaneously attacked, or otherwise; and whether it commenced contemporaneously in more than one site in the same town or district, or whether it appeared to spread from one point only. Were there any peculiar circumstances observable in its local character, or in the course or direction of its advance, which may throw any light upon the important question, whether the disease be of a contagious† nature or otherwise?

4. Have you invariably been able to trace the disease to local impurity of the atmosphere, or have you seen it attack persons living in a pure air, apart from grave-yards and other sources of putrefaction, in well-drained and well-ventilated dwellings? In cases of the latter description, if any have been observed, has there been any intercourse with the sick which may tend to establish the doctrine of contagion, or the reverse?

5. Did the cholera appear in your neighbourhood with or without the general and contemporaneous appearance of the milder forms of disease,—diarrhoea, bilious cholera, &c.? Has dysentery or typhus been prevalent or otherwise?

6. Were its ravages indiscriminate as to personal vigour, age, sex, station, occupation, &c.; or might the attacks be traced to some predisposing personal cause,—as weak bowels, intemperance, debility, fear, errors in diet, uncleanly or sedentary habits, or impaired health from any cause?

7. Were "premonitory" symptoms of general occurrence, or did the disease frequently appear suddenly in its malignant form, with violent cramps, vomiting and purging, "rice-water" dejections, and rapid collapse?

8. Did the symptoms differ from those generally observed and frequently described? Had the disease any peculiar type either of mildness or malignity?

9. Are you aware of any exempting circumstances of any description, which have uniformly protected certain individuals from the disease,—such as trades, habits, diet, &c., not inclusive of local habitation?

10. Can you throw any light on the physical origin or remote cause of the recent or former visitation? Are you able to say, from your own observation, that the general symptoms and history of both are similar? Have you instituted any researches into the density, humidity, temperature, or electro-magnetic phenomena of the atmosphere; especially have you inquired into the relative quantity of ozone existing in the air

* In using the term *cholera*, or in responding to any inquiry concerning it, please to adhere strictly to the definition in the last number of the Journal. (Sep. 5, page 490.)

† A house or district may be infected, so as to spread a disease not strictly contagious. Respondents are therefore requested to confine the latter term to evidence of communication by personal approach or contact.

during the prevalence of this epidemic, or the former visitation; and have you compared it with the proportion observable during the last visitation of the influenza? * Have you observed the progress of the cholera to be arrested by storms, wind, or rain?

11. Have you made any *post-mortem* examinations of fatal cases of cholera, and with what result? Do you know of any circumstances which justify the immediate interment of the dead? Did you ever observe cholera patients shew signs of organic life for hours or days after apparent death?

12. Can you describe any method or principle of TREATMENT which has proved successful in so large a number of cases of cholera, as to commend it to universal adoption? If so, has not the method frequently failed in other hands, and can you explain the cause of failure?

13. What mode of treating the epidemic diarrhoea and premonitory symptoms generally have you found most successful?

14. Can you suggest any means of preventing or arresting the spread of the disease, in the event of any future outbreak?

15. What is your opinion as to the propriety of removing the inhabitants, who have not taken the disease, from the infected dwellings to houses of refuge, in situations where the presumed causes of the disease are not in operation?

Proceedings of Societies.

BIRMINGHAM PATHOLOGICAL SOCIETY.†

April 5th, 1849.

DR. FLETCHER IN THE CHAIR.

Heart with contracted and thickened mitral valve, dilatation of all its cavities, hypertrophy of the left ventricle, and coagulation of blood, with deposit of fibrinous layers in the apex of the left auricle. Also lungs, in which were large apoplectic deposits of blood in the posterior and inferior portions, and general congestion; a portion of nutmeg liver, and congested and softened kidneys, all from the same subject.

This, Dr. Fletcher said, was another case of equal interest in the same physiological point of view as the last case,—namely, as illustrating the effects of impediment to the circulation, in this case caused by the diseased mitral valve, by which had been produced great dilatation and coagulation of blood in the left auricle, apoplexy of the lungs, dilatation of the cavities of the right side of the heart, great general venous congestion, and general anasarca, which must still have caused a loaded state of the arterial system; and hypertrophy of the left side of the heart came on to counter-balance this ill affection of the disease. The case occurred in the person of Sarah Hackett, aged 56, a small-made woman, who was admitted under the care of Dr. Fletcher, into the General Hospital, November 11th, 1848, suffer-

ing from mitral disease of the heart, and general anasarca and ascites. She had been out of health for some time, but quite ill for two months, and had been taken worse during the last three weeks. She had never had rheumatism. She then suffered from dyspnoea, giddiness, and singing noises in the ears. The heart's action was very irregular, and the pulse very intermitting. A rough systolic souffle was heard all over the precordial region, and attained its maximum towards the apex of the heart, under the left breast. Urine, specific gravity 1025, no albumen. She was enjoined perfect rest, and the history of the case only shows the urgency of different congestions, presenting from time to time, which were met by such remedies as were calculated to diminish their integrity and ill effects; at length, worn out by disease, she sank early in April, and the parts which presented anything of importance at the *post-mortem* examination are now before you, and are as I have already described them.

Ulceration of the Peyer's glands of the lower portion of the ileum; soft and large spleen; large and congested kidneys; inflamed and congested lungs; from a patient who died in the second week of fever.

Dr. Fletcher related the following particulars of the case:—

He had been brought into the hospital from a distance of nine miles, two days before his death, suffering from typhus fever, accompanied by pneumonia of the right lung. He was in a very collapsed state when brought in, and never recovered. He had been ill eleven days.

A multilocular ovarian cyst, weight forty pounds, successfully removed by operation.

Mr. F. Elkington related the following case:—

Mrs. M., Walsall, consulted me in June, 1848. She states that she is a dressmaker, and 31 years of age. Has been married fifteen months.

General appearance.—Tall, thin, and anæmic. First menstruated when 17 years of age, and continued regular and in good health till about two months before she was married. During the two months preceding her marriage she was unwell every fortnight; sometimes very weak, and for several days each time; in fact she was scarcely ever free from a discharge. This continued for six weeks after her marriage. A few weeks before she had pain in the right side, "like a stitch." About three months after her marriage she began to increase in size, and first of all in the left side. In about one month from this time (being four after her marriage,) she increased rapidly, being "unwell" every week, and for five days at a time. During the last three or four months she has been "regular," menstruation occurring only once in the month, but continuing so for five days each time. The discharge was dark coloured, frequently coagulated, and smelling badly. Her general health and appetite has been good; she has seldom been sick. There is no increase in the breasts except when she is going to be "unwell." Has difficulty in making water, and passes but little; bowels regular. There is complete prolapsus uteri, which commenced about six months ago; at times it is the size of her hand. Can lie on either side, but

* See an article on the causes of cholera, by Mr. Robert Hunt, in the "Athenæum," Sep. 1, 1849.

† Continued from page 499.

best on the left. When the swelling began she could not lie on either side; tongue furred and swollen; pulse slow and weak. She has consulted two surgeons, who said she was pregnant.

Examination of the abdomen.—She is as large, or nearly so, as a woman at the full period of utero-gestation. The tumour is very moveable, irregular, and nodulated; there is indistinct fluctuation, varying in its character at different points. The breasts are small, and there is no areola around the nipples. The stethoscope being applied over the abdomen, no "bruit" could be heard in any part of the tumour.

Examination per Vaginam.—After replacing the uterus there could be felt no enlargement of that organ.

Diagnosis.—Ovarian tumour of the left side, of the multilocular form. She gradually increased in size, and about Christmas, or in January, 1849, measured forty-five inches round her. She now began to suffer very much from the great size and dragging of the tumour; her breathing was much embarrassed. She was tapped February 28th, 1849. The trocar was introduced through the linea alba, about three inches below the umbilicus. After a quart of thick fluid had been drawn off, no more flowed. A probe was then passed along the canula, when I found that the cyst was emptied, and that the point of the probe was pressing against another cyst. The trocar was again introduced, pushed on, and another cyst opened. At first there was scarcely any escape of fluid, but after repeatedly passing a probe along the canula, the contents of the cyst slowly ran off. We succeeded in drawing off about five or six gallons of thick,ropy, albuminous fluid. The second cyst having been emptied, it was found that the size of the tumour was reduced only about two-thirds, and that there were still several other cysts, but it was not thought advisable to empty them. In a few days she was convalescent. She again very rapidly increased in size, and in less than a month was as large as ever. Having made up her mind to submit to ovariectomy, I was requested to operate. She was made fully aware of the importance and great risk of the operation. It was performed in the presence and with the assistance of Dr. Clay, Mr. Fletcher, Mr. Dehane, and several other friends.

An incision of about twelve inches in length was made through the abdominal parietes, and after separating two or three slight adhesions, it was found necessary to diminish the size of the tumour before it could be got through the opening. The pedicle, which was very broad and vascular, was divided into two parts, and each tied with a very strong ligature. The tumour weighed forty pounds. She recovered rapidly; in fact she had not a single bad symptom. The wound was entirely healed, with the exception of the lower part, where the ligatures passed out, in seven days. The first ligature came away on the eighteenth day, and the second on the twenty-first day. She was down stairs a few days after, and is now to all appearances perfectly well.

Inflammation and obstruction, by fibrin, of the left brachial, axillary, subclavian, external, and internal jugular, and innominate veins, and of the superior cava.

Dr. Russell related the following case:—

Mrs. Bibb, aged 39, a paper stainer, came under my

care as a patient of the General Dispensary, February 2nd, 1849, and was attended by Mr. Shaw and myself. She was the mother of five children. Has always enjoyed good health. Her menstrual periods have been very few. For the last six or eight months has lived very badly. She is suckling an infant eight months old. She has not been well since Christmas, and has had a cough. Three weeks before I saw her, having had some feverish symptoms the preceding day, she awoke in the morning with considerable œdema of her face and hands, and of her feet and legs, attended by severe pain in her limbs. She had not been in any way exposed to cold or wet, and could not assign any cause for her attack. The swelling of the limbs soon increased to a great extent, and her abdomen also enlarged. Under treatment, however, the effusion somewhat lessened, and the quantity of urine increased; but on the 26th (a fortnight after her attack,) the swelling rapidly subsided. On this day her cough, which had previously been worse, became very severe, and was accompanied with much mucous expectoration; her urine, too, again diminished.

When I saw her, February 2nd, she was suffering from urgent dyspnoea, and from frequent tearing cough, without expectoration, her face was pale and thin, and she preferred lying with her head low. Respiration 42; pulse 132, feeble and regular; skin cool; there was no œdema. Her chest clear on percussion. There was rather small crepitation, and some constricted breathing throughout. Her state strongly suggested suspicion of the existence of pericarditis, with effusion, but the heart's sounds were healthy, though feeble. There was no fullness of the cervical veins. She passed about half-a-pint of urine in twenty-four hours; it was loaded with pinkish yellow lithates, very acid; specific gravity 1022, very albuminous; the lithates were not deposited by standing. It contained many full-sized fibrinous casts, a considerable number of lithic acid lozenges, and some groups of stellæ of lithic acid. I found that she had been in the habit of passing water two or three times by night for a long time. I ordered a blister, small doses of tartar emetic, with ammonia and æther, and some morphine syrup, to relieve the painful irritative cough.

She gradually improved, her breathing becoming easier and slower, and her pulse falling, but the cough was severe, and still dry; her skin remained cool; her urine continued very scanty; and although the sounds in the left side of the chest became nearly healthy, creaking and crepitation continued throughout the right side; she was, moreover, subject to attacks of severe dyspnoea. I repeated the blister, and gave small doses of blue pill, and of ipecacuanha, and bitartrate of potash, at short intervals, to affect the bowels, with further benefit, but she continued very feeble, unable to raise herself, and subject to fits of dyspnoea. The quantity of albumen in her urine diminished, though the casts continued; the lithic acid also lessened in quantity; her urine continued scanty. She subsequently took tonics and wine.

On the 25th, (twenty-three days after I first saw her,) she was attacked with œdema of the left leg and foot, with deep-seated tenderness in the calf, and cramp pains in the leg, though without any local heat. By appropriate treatment this entirely subsided in about a fortnight, but on March the 6th her left arm became very œdema-

tous, with great pain, and some tenderness, chiefly in the situation of the brachial vessels. The cedema increased, and in five days extended over the front of the left side of the chest, producing much swelling above and below the clavicle; the left mamma also became greatly enlarged, though free from tenderness, and lax. I found the left external jugular quite hard, but without any induration of the tissue external to it. The cutaneous veins of the breast were distended; there was much tenderness in the axilla, and in the inside of the upper arm, and some hardness along the vessels, rendered indistinct, however, by the cedema. The patient was greatly sunken; she, however, revived somewhat, and lived for a fortnight longer. Some of the cutaneous veins of the mamma became hard towards the last, and there was some tenderness of the right side of the neck, but no induration. The cedema extended to the integuments of the abdomen, without affecting the lower extremities; her face became blue and very puffed; her breathing more laboured; her senses were generally little impaired. She died March 24th. The treatment consisted chiefly of wine, stimulants, and Pulv. Jalapæ Co.

I examined her thirty-three hours after death, with Mr. Shaw. Face livid, and somewhat bloated. A large quantity of bloody serum beneath the cuticle of the back and loins. Cellular tissue of the trunk exceedingly cedematous. *Abdomen* did not contain fluid; intestines healthy externally; spleen healthy; right kidney flabby and much loaded with blood; left smaller than natural; much loaded with blood; its cortical and tubular portions much contracted; fat around its pelvis, and several cysts in one extremity. I was unfortunately prevented from examining its tissue under the microscope. *Liver* seemed healthy; it contained a large quantity of fat, and its cells contained a large number of oil globules. A round tumour about the size of the fundus of the gall-bladder projected from its acute margin, about an inch to the left of the gall bladder; it was composed of stiff, moist, chalky matter, enclosed in a fibrous cyst. *Chest*: A large quantity of fluid in each pleura; the lungs much compressed and loaded with blood, but crepitated throughout; they were free from tubercles. *Heart* flabby; all its cavities, especially the right auricle and left ventricle, contained much blood; valves healthy; lining membrane healthy, except that of the right auricle, which seemed rather opaque. The pericardium contained from one and a half to two ounces of bloody serum. *Large vessels*: The axillary and subclavian veins of the left side were quite filled up, and even distended by fibrin, deeply coloured in the former, slightly coloured in the latter; the commencement of the brachial vein was similarly filled with fibrin, which gradually lessened in quantity in descending. The fibrinous contents of the brachial and axillary veins were soft in the centre, and allowed air to be blown down; they would possibly have permitted the passage of a little blood. The lower inch of the internal jugular—the only portion removed—was similarly filled with deeply coloured fibrin; the vena innominata also contained fibrin, which thence became smaller in quantity, but covered the interior of the descending cava, down to the opening into the auricle. The fibrin adhered very firmly to the inner coat of the veins, and resisted separation. The coats of the veins

(except those of the cava,) were thickened, but no lymph had been effused external to them, and their lining membrane, (examined after they had been some time in spirit,) was quite smooth after the fibrin had been removed. The arteries healthy; the abdominal vessels and iliacs healthy.

(To be continued.)

NOTES ON AMERICA: ITS MEDICAL SCHOOLS AND ESTABLISHMENTS.*

By EDWARD HUMPAGE, Esq., M.R.C.S., Bristol.

BOSTON.

The city of Boston, in the state of Massachusetts, is more like our own cities, than any other in the United States. It is old for the States, is built irregularly, and its inhabitants—about 150,000—are much more like English people than those of New York. It has one medical school, considerably smaller than those of New York, but ranking high as to its professors and its general advantages. The hospital associated with the school is a fine erection of granite; it contains about 200 beds, its wards are lofty and cleanly, the comfort of the patient being studied in every possible way; but I was much surprised to find, in all the wards, the thermometer standing at 70° Fahrenheit, and in one or two at 72°. To my feelings the heat was oppressive, nor did this arrangement give me a very exalted idea of the Bostonian views, as to the importance of cool air in the treatment of disease; the fact is, the summer heat of the climate is so great, that they have no just appreciation of the effect of such a temperature as 70° on invalids. Dr. Hayward the senior-surgeon, reminded me very much of our late esteemed and talented physician, Dr. Prichard.

At this hospital also, I found Dr. Warren, well known in this country as the author of a work on tumours. A son of this gentleman is also one of the surgeons. I saw him perform the operation of amputation of the thigh. The patient—an Irishman—had received an injury to the blood-vessels, by a wheel passing over the limb. There was considerable ecchymosis, but no fracture or breach of continuity; indeed, such a case as in this country would have been treated by free incisions; but in America they appear to dread the appearance of tetanus after many kinds of injuries. The patient was stupified by chloric ether, inhaled from a large sponge. This preparation is often preferred to chloroform, as being less injurious in its effects on the brain, and equally valuable as an anæsthetic agent. The operation was quickly performed, but I observed that the muscles were not dissected back, as is usual with us, and I should fear there would be a protrusion of bone during the healing of the stump.

The operating theatre was very spacious, more particularly the floor, on one side of which I saw a *huge glass case*, containing all imaginable surgical instru-

* Concluded from page 275.

ments, so that I was reminded of the shop stock of our makers. There may be some convenience in this arrangement of forces for our immediate use; but to my old-fashioned English notions, the display did not appear the most delicate or agreeable.

The medical school is near the hospital, and is well arranged as regards its lecture rooms and lecturers. A very civil "janitor," as they call the porter, gave me all necessary information. The number of students was about 150, the majority of them appeared of better quality than their brethren of New York, and indeed the school had quite the character of respectability and selection.

I heard the Professor of Midwifery, Dr. Channing, (a brother of the eminent divine of that name, lately deceased,) who on that occasion deviated from his usual course, and instead of a lecture, gave his class a very instructive history of a case he had just left; it was one requiring the use of the forceps from want of uterine action. He admirably described their application, and made some highly practical comments on their utility in certain cases. He spoke also of the use of chloroform, but he is evidently getting a little cautious of its application, which he thinks is sometimes highly dangerous. I had an agreeable interview with Dr. Channing, who has visited Europe, and spent some time in London and Edinburgh. Dr. Channing has written on diseases of the uterus, including polypi, and diseases of the ovaries. One of his cases I give, as affording some points of interest.

"Mrs. ———, married, has children. I saw this patient with another physician. A tumour, filling most of the lower part of the abdomen, presented itself. It was unequal in its outline, as if composed of many tumours. It was felt in the vagina, and so far filling it as to press the neck of the womb firmly against the symphysis, giving much trouble in passing urine. The uterine periodical function continued. Much suffering attended this disease. At times acute inflammatory attacks. The health had sunk, emaciation had occurred. The situation of the patient seemed hopeless. In its treatment, constant efforts were made to sustain the patient while means were used to keep inflammatory processes in check, and to prevent increase of the tumour. Leeches, vesication, iodine ointment, hydriodate internally, the solution of muriate of lime, &c., were among the means employed. At length, a new symptom showed itself, which was the precursor of recovery. An involuntary and copious liquid discharge took place from the rectum. Some of it was collected in a vessel, and examined; it was a perfectly transparent, dense, gelatinous liquid, very adhesive, and having a distinct albuminous odour. There was not the least trace of fecal smell in it at any time. The discharge went on, the tumour grew less, the pains which Mrs. ——— had so long suffered ceased, she regained appetite, strength, flesh, and is now well.

"Is not this case of some interest in this regard, that it shows how a disease of the ovary, consisting of a fluid deposit, and threatening life, may disappear, and recovery happen, where opportunity is offered for a constant discharge of the fluid as it forms. The sac or

sacs thus have an opportunity to contract, new processes occur in them from exposure to the air, and at length the sac disappears. What is done by a rude surgery, the pulling away or cutting away the sac, or removal of the tumour by excision, is done by a gentler and wiser hand, and recovery follows. May not the ovary be punctured through the rectum or vagina, and the natural surgery be thus in some sort imitated?

Connected with the medical school is a small museum of pathological anatomy, presented by Dr. Warren; it contains some fine specimens of tumours, and also some good casts.

Boston abounds with doctors of all grades, neither are our brethren very particular as to what they do for a maintenance when patients are scanty. At the boarding-house where I was staying the clerk of the establishment was an M.D., and he told me that practice being "flat" he filled up his time by attending to the duties of the boarding-house finance. He had received some medical education from lectures and hospital practice, and was an intelligent person, although his information on surgical subjects was very limited, and his practice but very small.

The profession altogether in the States has not the same standing as in England; its influence with the public is less, just because its members are not so select, or well educated. A bold quack soon commands a large practice in all their great towns, and such persons frequently reap golden harvests, while the better educated, but more modest medical man, just makes a living.

With a few remarks on the climate and habits of the people in the United States, I will close these rambling recollections. There can be no doubt that the people generally do not enjoy the same amount of robust health as we see among a similar class in England.

There is a "lean and hungry" look about an American, quite characteristic of the race; and the very reverse to the burly, bustling, hard breathing, loud talking son of John Bull. Not that all complain, but a large proportion suffer from various forms of dyspepsia, and lose their teeth at a comparatively early period of life. This loss among the women produces a sad alteration of countenance, and instead of the wholesome hearty-looking matron of forty-five or fifty, you see a miserably thin, haggard old woman, with a sallow skin, sunken eyes, high cheek bones, and attenuated form. Just so with the farmers, who look shrunk and sallow, particularly if they live in some of the malarious districts through which the Erie canal passes. All new settlers get ague or dysentery, and many a man, after filling his pocket with dollars, the result of a few years' of agricultural industry, ends his days in a condition of miserable health.

Many causes combine to produce the state of public health, as it is seen in the United States; and, first, the remarkable dryness of the climate, which seems to prevent any adipose deposition in the tissues.

I found even during my short stay a manifest difference in the general appearance of the body; the skin became dry; there was no cuticular exhalation; the subcutaneous tissue seemed altered; and I believe,

had my stay been extended for twelve months, the same sharpness of feature and keen outline of countenance would have come over me. Another cause is the sudden and rapid change of temperature which so frequently takes place. It was often in the month of October as hot as our July, and at night as cold as December. Instances have been known where the thermometer has fallen 38° Fahrenheit in the course of eight hours.

In the month of March the thermometer has been known to stand in the morning at 54°, and at four p.m. at 18°, with a snow storm; thus, in five hours, the mercury falling 36°. On another occasion, in May, the thermometer at three p.m. was 52°; at nine p.m. 27°, with a snow storm.

The spring is the worst period of the year: such sudden heat and cold, that bronchitis, and indeed all diseases of the mucous membranes, become very prevalent and destructive.

We complain about the humid climate of England, and of our changes of temperature, but we have a far more healthy atmosphere than the inhabitants of the States, who certainly suffer more from *want of moisture* in the air, and consequent irritation of the mucous surfaces, than we do from our insular humidity.

But besides these atmospheric causes, which are constantly influencing the public health, the habits of the people are quite at variance with the laws of hygiene. Everybody eats awfully fast; ten minutes is the average time for dinner; they take abominable compounds of sweets, jellies, and preserves; they never eat bread that is twenty-four hours old; and they pay no attention to ventilation in their houses, or steam-boats, where four or five hundred persons are assembled in a hot saloon, sleeping in as foul an atmosphere as can be well imagined. It is not therefore to be wondered at, that we see dysentery, phthisis, and now cholera, making sad ravages. Nor can we be surprised to know that their women suffer dreadfully from child bearing, and that the proportion of deaths, from this cause, is much higher than with us.

Much, very much might be done, to improve the sanitary condition of the inhabitants of this vast and wonderful country, increasing as it is every year, in an almost incredible manner, could they be persuaded to leave off smoking and chewing tobacco, and attend more to dietetics and ventilation; but I am fully persuaded that America will never be equal to old England, for its general salubrity and mildness of climate.

Foreign Department.

DR. McCARTHY ON SWEATING SICKNESS.

NOTICE ON MILIARY FEVER (SWETTE MILIAIRE.)

In several departments of France, miliary fever has within the last six weeks shewn itself in an epidemic form; and has been very frequently fatal.

The disease takes its name from the vesicles which appear on the skin, resembling in size and shape the seed of millet. It is habitually a benignant malady,

and a fatal termination is almost invariably the consequence of mistreatment. Miliaris is of the same nature as other eruptive fevers, and is characterized at its first appearance by shivering, succeeded by heat, loss of strength, oppression, and a low quick pulse. The tongue is dry and white, and the body costive. At this period abundant perspiration is frequently observed, and at the same time an itching pain under the skin, succeeded by the eruption of innumerable small vesicles of the size of millet seeds, first upon the neck and breast, thence gradually extending to the remainder of the body. These pustules often lose their redness and appear of the ordinary colour of the skin. The breaking out of this eruption is usually followed by relief. The vesicles burst after forty-eight hours, leaving a thin crust on the skin, and the symptoms rapidly decrease.

The treatment consists—

- 1st. In the exhibition of ipecacuanha as an emetic.
- 2nd. Saline aperients.
- 3rd. Cool drinks, slight covering, epigastric sinapisms in case of oppression.
4. To avoid carefully much covering, warm drinks, and blood letting. They are often injurious in miliary fever; in the present epidemic they have often brought on fatal results.

Dr. Taufflieb, who gives an account of it as it occurred in Andlan and Nothalten, states that it commences with a slight rigor, followed by continual abundant and foetid perspirations. For the first two days the symptoms are not alarming, but they speedily become so, from the appearance of anxiety, palpitation, and dyspnoea. If these symptoms are not relieved, a state of coma is superinduced, and the patient dies insensible. In some few cases there is delirium and convulsion. In favourable cases the respiration becomes more tranquil, the pulse falls in frequency, and a miliary eruption declares itself over the neck and shoulders, and under the clavicles, which fades away on the fifth day. In many cases the eruption is altogether absent, although the other symptoms observe a regular course.

The treatment required consists in the endeavour to prevent the paroxysms, and to moderate them, when they cannot be cut short. The patients being very sensitive to changes of temperature, M. Taufflieb advises a mild but equable warmth. He gives quinine in large doses during the intermission; but when the rigor is once established he has recourse to diffusible stimulants and external warmth. In short, the treatment appears to be precisely that of intermittent fevers, of the more pernicious kinds, such, for instance, as are witnessed in Florida.

PSEUDO-MEMBRANOUS BRONCHITIS.

M. Thore has recorded two cases of this disease similar in most of their details to one we recently published in this Journal. The expectorated matter was viscous, partly floating and partly sinking in water; but its chief peculiarity consists in the presence of tubular prolongations, which accurately represent the divisions of the bronchi. This pseudo-membranous production is of a very white colour, and

seems to consist of elongated fibres, possessing considerable powers of resistance. The author does not regard them as identical in nature with the false membranes of croup.

Among the predisposing causes of the affection, he names the lymphatic temperament as the most potent. One of his cases occurred in a youth who was decidedly rickety, and the other had evident symptoms of pulmonary tubercle.

The disease appears to be in many cases attendant upon some other affection. Thus M. Nonat, in 1837, observed it in connection with pneumonia. It has also been noticed as a complication of typhoid fever by M. Fauvel, and of capillary bronchitis by MM. Bonamy and Malherbe. It may be either acute or chronic; in the former case terminating in from ten to twelve days, in the latter lasting several months. The symptoms are in general sudden in their onset, the disease announcing itself by urgent dyspnoea, which cannot be accounted for by examination of the chest. Percussion gives negative results; auscultation makes known a variety of rales, mucous, sibilous of different intensities. The vesicular murmur is obliterated in the lung affected. A very characteristic sign is the suffocative dyspnoea, which precedes the expulsion of the false membranes, as contrasted with the immediate relief which follows. The intervals of the attacks of dyspnoea are lengthened in proportion as the condition of the patient ameliorates. The pulse is always quick.

The diagnosis is difficult in the first instance, but the nature of the case is soon developed by the appearance of the characteristic sputa. It is generally fatal when it supervenes upon prior disease, but its danger is not great in the uncomplicated form of the disease. The treatment is that of bronchitis.

[For an account of the knowledge of this disease possessed by British practitioners, the reader is referred to the case above referred to.—*Trans.*]

ANATOMY.

ON THE MEDULLARY SUBSTANCE OF BONE.

M.M. Gosselin and Regnault have recently published their researches on the structure of the medulla of bones and its membrane, (*Archives Generales*, Juliet, 1849) They describe the results furnished:—1. By examination with the naked eye. 2. By the aid of the microscope. 3. By the aid of chemical analysis.

1. The medulla of bones presents to the naked eye great differences, not only in different genera of animals, but likewise in individuals of the same species. The modifications in its appearance are chiefly of two kinds, the one consisting in the superabundance of fatty matter, the other in the preponderance of a gelatinous substance. Both these present further variations, which are compatible with health.

The effect of disease still further diversifies the appearance of the marrow. Inflammation in the bones, as elsewhere, causes the absorption of fat, and the medulla in that case puts on the gelatinous appearance.

Age has a constant and notable influence on the appearance of the medulla. During the first year of life it is more gelatinous, as age advances it assumes the fatty type. The authors have not been able to discover any trace of the so-called medullary membrane.

2. *Microscopic appearance.*—Henle distinctly states that cellular fibres, similar to those which are found in membranes, are seen with the aid of the microscope to exist in the medulla. Mandl makes the same assertion. The authors affirm, that after the most considerate attention, they have failed to find fibres; their researches have been made both in the human subject and on animals, and the result has been the same both in the long and the spongy bones.

3. *Chemical analysis.*—The authors range the chemical principles contained in the medulla into four processes—the fatty matters, salts, albuminoid matters, and water. The mean of eight analyses of medulla from the long bones gives, of fatty matter 81.200, salts 0.062, albuminoid matters 3.902, water 14.829.

In recapitulating their investigations, the authors state that the medullary membrane, so minutely described by certain anatomists, has no existence; that the fatty matter of bones differs from that of other parts of the body, in that it is not divided into lobes or lobules by prolongations of cellular tissue, the fatty particles are separated only by extremely fine capillary vessels. They further observe, that as the membrane has no existence, the functions attributed to it must be abandoned. Thus we must no longer affirm with Flourens, that absorption of bony matter in the interior of the canal takes place by its agency; nor must we attribute to it the formation of callus, and the injection and suppuration attendant upon osteitis.

MIDWIFERY.

CRANIOTOMY: THE CHILD BORN ALIVE.

A remarkable case is narrated in the annals of the Medical Society of Flanders, in which craniotomy was performed in consequence of deformed pelvis, but the child could not be extracted. As a last resource the Cæsarean section was performed, and, to the astonishment as well as horror of the surgeon, the infant was extracted alive, and exhibiting an immense lacerated wound of the skull. The brain was completely denuded, and appeared to be reduced to a complete pulp. The child survived, and suppuration was established, large quantities of brain coming away at intervals with the purulent matter. When exhibited to the Society, the child (a boy) was nine years old, and did not appear intellectually inferior to the average of boys of his age. The mother did well, and died some years afterwards of fever.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DE MEDECINE, PARIS.

This Academy is still occupied by occasional discussions on cholera. M. Bally and Dr. Geslain reported instances strongly corroborative of its contagious nature; and, on the other hand, M. Rochoux related others in proof of the opposite side of the question.

An opinion has been propounded that syphilis is preservative against cholera. This idea originated in the fact, that several venereal hospitals escaped the disease altogether. Some attributed the immunity to the disease, others to the mercurial treatment to which the patients are necessarily submitted. By one or two

persons the idea of inoculation with syphilitic virus, as a prophylactic, has been seriously entertained, but the commission which was deputed to report on this truly French proposal, very properly condemned it.

ABSTRACT OF THE PROCEEDINGS OF THE ACADEMIE DES SCIENCES, PARIS.

This Academy has also received several communications on cholera, but, like the great majority of those which are produced on this side the channel, tend to continue the confusion which surrounds this mysterious disease, than to throw any new light upon it. Thus M. Andraud endeavours to establish a connection between the intensity of the pestilence, and the absence of electricity in the atmosphere; another writer has noticed that its greatest virulence coincides with the period of full moon; and a third, with an ominous name, M. Boubeé, asserts in a memoir upon the geological progress of cholera, that it makes its irruptions constantly in localities situate over the tertiary alluvial strata, and in those soils which contain an abundance of friable sandstone, capable of absorbing moisture, and in dry weather affording much damp by evaporation. M. Piorry proposes to inject the bladder with water, with the view of restoring the fluid lost from the blood.

M. Coze has presented a memoir on the physiological action of hydrocyanic acid, the conclusions of which are as follows:—1. Hydrocyanic acid does not exert any special influence on the nervous centres. 2. Its action, even when death is very sudden, is principally on the circulatory system. 3. Death is caused by suspension of the heart's action, and by constriction of the arterial capillaries. 4. The convulsions which attend poisoning by this acid result from anæmia of the spinal chord.

General Retrospect.

ANATOMY.

RESEARCHES ON THE INVESTING FIBROUS MEMBRANE OF THE HEART.

By Dr. Robert Lee.

In support of their opposition to Dr. Lee's views on the nervous supply of the uterus, the heart was adduced by some anatomists as a muscular organ, sparingly, if at all, supplied with nerves. In order to take this ground from under their feet, Dr. Lee has instituted a minute anatomical examination of the organ with the following results:—

He observes that in September, 1846, being dissatisfied with this evidence, he resolved to appeal to nature, and proceeded to dissect the nerves of the heart immersed in alcohol, as he had done those of the uterus, with magnifying powers of six and twelve diameters. The investigation was carried on during two years, and from the examination which he has made of the nerves of the healthy and malformed fetal heart; of the hearts of birds; of the heart of the child at the ages of six and nine years; of the heart of the adult in the sound state; of the human heart

slightly and greatly hypertrophied, and of the heart of the young and adult ox, the following conclusions may be deduced:—1st. That the blood-vessels and the muscular structure of the auricles and ventricles of the heart are endowed with numerous ganglia and plexuses of nerves, which have not hitherto been described or represented in the works of anatomists. 2ndly. That the nervous structures of the heart, which are distributed over its surface to the apex, and throughout its walls to the lining membrane and columnæ carneæ, enlarge with the natural growth of the heart before birth, during childhood and youth, until the heart has attained its full size in the adult. 3rdly. That the ganglia and nerves of the heart enlarge like those of the gravid uterus when the walls of the ventricles are affected with hypertrophy. 4thly. That the ganglia and nerves which supply the left auricle and ventricle in the natural state, are more than double the size of the ganglia and nerves distributed to the right side of the heart.

This anatomical demonstration of the ganglia and nerves of the muscular substance of the heart he states completely overthrows the last remaining argument employed by those physiologists who still defend the doctrine of Haller, that the irritability and contractibility of muscular fibre is independent of nervous influence. This demonstration further clearly indicates the source of the actions of the heart as an entire organ, and how its detached parts can continue to contract after its total separation from the body. It likewise furnishes a satisfactory explanation of many phenomena observed in the progress and treatment of organic diseases of the heart.—*Medical Times*, August 11.

PHYSIOLOGY.

ON THE DEVELOPMENT AND USE OF THE SPERMATOOZOA.

The following account of the origin of the spermatozoa is given in the "Cyclopædia of Anatomy and Physiology."

1st. All spermatozoa originate in "formative vesicles," which appear to resemble the secreting cells of glands in being metamorphosed epithelium-cells of the glandular tubuli or follicles.

2nd. From these formative vesicles, the spermatozoa are produced in one of the three following modes:—*a*, by the conversion of the cell-membrane and nucleus of the formative vesicle itself into the spermatozoon—a method in which the change is the least possible, and which is only found among certain worms; *b*, by the metamorphosis of the nucleus of the formative vesicle into the spermatozoon—a method which is much more common, especially among the lower animals, in many of which (as chilopoda and acarina,) the spermatozoa remain as solid massive corpuscles, resembling the nuclei from which they sprang, instead of having the filiform shape of ordinary spermatozoa; *c*, by the endogenous development of cells originating in the nucleus of the parent cavity, each young cell producing a spermatozoon within it. This last method is that which we find in all the higher animals; but its latter part may take place in two ways. The parent vesicle may burst and set free the young cells, before the latter have begun to form the spermatozoa, which then

evidently issue from them. But it frequently happens that the development of the spermatozoa takes place, whilst the cells within which they are formed are yet within the parent vesicle; and the walls of these cells give way, so that the spermatozoa come to be associated together in bundles, with the parent-cells, as formerly described by Wagner, and are finally set free by their rupture. The authors of the "Cyclopædia" regard the spermatozoa as the essential constituent of the semen.

MEDICINE.

DRY CUPPING IN HICCUP.

Mr. Hunter states that he has found this lately a successful means of checking hiccup. A soldier was attacked with vomiting and purging. After these symptoms had subsided, he was teased with the most distressing hiccup, which he said kept him awake half the previous night. There was slight epigastric uneasiness on pressure. Dry cupping over the region of the epigastrium, leaving the glass on half an hour, stopped it almost instantly. It recurred again after taking some beef-tea, but was readily checked by a reapplication of the glass. It also relieved the epigastric uneasiness.

SURGERY.

RESECTION OF THE HEAD OF THE FEMUR.

Mr. Fergusson has recently performed this important operation, the interest attaching to which is heightened by the difference of opinion which has lately called forth a discussion on the point.

The patient, a boy of ten years old, was brought into the theatre, and placed upon the table, having previously been rendered insensible by chloroform. The diseased limb being uncovered, an unequivocal specimen of morbus coxarius in its last stage was presented. The head of the bone was dislocated on the ilium, and could be felt through an opening which had been made over it. A large circular sore also existed over the trochanter, which was prominently protruding. The limb appeared to be much shortened, and the knee thrown across the other.

Mr. Fergusson carefully examined the parts with his finger, and then commenced the operation in the following manner:—An incision, about four inches in length, was made over the head of the bone, and carried below the great trochanter; the soft tissues were dissected from the sides of the bone, and the knife cautiously carried behind its neck, separating, as much as possible, the soft parts; the limb was then carried inwards by an assistant, and the section made by a small saw, below the trochanter major, and that process, together with the head of the femur, removed.

The cotyloid cavity was then examined, for the purpose of ascertaining if there was any disease to be removed, but it was discovered to be filled up with a mass of soft tissue which had been thrown out during the course of the malady. Several small vessels required a ligature. The wound was brought together, and the patient removed to bed. After the removal of the bone, the limb could be brought down straight with the other.

Mr. Fergusson, in the course of some observations, stated this to be one of those cases which surgeons—in

London at least—denominated morbus coxarius in its last stage, and that the little boy, who had laboured for eighteenth months under the disease, was sent into the hospital for his opinion as to the propriety of performing the operation of re-section of the head of the femur. When the patient was first brought into the house, it was evident that dislocation existed; there was a large open sore over the trochanter major, and a profuse discharge of matter coming from it, which had greatly debilitated him. In order to ascertain the precise condition of the bone, and also to give some relief to the patient, a counter-opening above the trochanter had been made, and the head of the femur exposed, lying on the dorsum ilii, and in the centre of a large abscess. The cartilage could be felt on the bone, but its structure was so softened that it could easily be penetrated by means of a probe. This measure had given the child some relief, but little hopes of further improvement. Mr. Fergusson regarded the head of the thigh-bone as a foreign substance, keeping up irritation; and as he could not ascertain that there was any disease within the pelvis, nor in any organ of the body, he therefore considered it best for the patient to give him the benefit of the operation.

He had performed it in the same manner as they had before seen; he had removed the trochanter as well as the head of the bone, not because there was any disease within that process, but because he had found from experience, that the wound healed more readily, and less irritation was afterwards caused, than when it was permitted to remain. They had seen that the limb could be straightened after the diseased part was taken away, and they would be able to keep it in a good position by the application of a splint.

With respect to the condition of the acetabulum, it was probable that in this instance disease had at one time been present; but in this, as in other cases, after dislocation had taken place, and the two surfaces of the joint were no longer in contact, a reparative process had followed, and the morbid action in the acetabulum had ceased.

There had been much discussion as to the propriety of this operation; it was a subject which admitted of, and ought to have, a fair and open discussion amongst surgeons. He looked upon the present case as one of great interest, and he hoped that it would turn out satisfactorily.

TREATMENT OF GRANULAR OPHTHALMIA.

Some interesting, and at the same time decisive experiments were recently made at the Military Hospital of Bruges, to determine the relative values of nitrate of silver and acetate of lead in the treatment of the above-mentioned disease. They prove the incontestible superiority of the acetate of lead.

This remedy was first introduced into practice by M. Buys, I believe, of Bruges Hospital. His mode of applying it is as follows:—The neutral acetate of lead is reduced to an impalpable powder, and applied to the eyelids by means of a very fine hair-pencil moistened with water, and then dipped in the powder. From one grain to one grain and a half, is sufficient to cover the whole inner surface of one eyelid, over which it is uniformly spread. After two or three applications, the granules disappear, and several ex-

amples of a prompt cure are related by Dr. Cunier, in cases which the surgeons had acknowledged to be rebellious to nitrate of silver. The application of the lead is likewise much less painful.—*Medical Times*, July 28th.

Medical Intelligence.

ACTION AGAINST AN UNQUALIFIED PRACTITIONER.

A case was lately tried at Hungerford, before the County Court of Berkshire, in which a person named Bishop, who resides at Ramsbury, in Wiltshire, was charged by the Apothecaries' Company with practising as an apothecary, without being legally qualified. Mr. W. H. Rowland, who appeared for the plaintiffs, stated the nature of the case, and explained that the action was brought under the 55th of George III., chap. 194, commonly called the Apothecaries' Act, by which it is provided that it shall not be lawful for any person or persons (except persons then in practice as such) to practise as an apothecary in any part of England or Wales, unless he has passed his examination, and received a certificate of his being duly qualified. He then adduced evidence to prove that Bishop, who possessed no certificate, had acted as an apothecary, and furnished medicines for the use of a man named Henry Bagman, who subsequently died. Mr. Astley, for the defence, endeavoured to show that the evidence had failed in proving the charge, and raised some technical objections, which were overruled by the court. He denied that there was any proof of his client, who was a very respectable man, practising at Ramsbury as a physician and chemist, having compounded the medicine. The jury, however, brought in a verdict for the plaintiffs for £20, the amount claimed. This is said to be the first case of the kind which has been tried on the merits.—*Lancet*.

DERBYSHIRE GENERAL INFIRMARY.

A special general meeting of the Governors of this excellent Institution, was held yesterday, for the purpose of electing a surgeon, in the room of John Wright, Esq., resigned.

The High Sheriff, Mr. Jedediah Strutt, then proposed, and Mr. Eaton Mousley seconded, the nomination of Mr. Henry Francis Gisborne, as a gentleman well qualified to fill the vacant office.

The Rev. E. H. Abney proposed, and Francis Wright, Esq., of Osmaston Manor, seconded, the nomination of Mr. S. W. Fearn.

Wm. Leaper Newton, Esq., proposed, and F. Hurt, jun., Esq., seconded, the nomination of Mr. S. H. Evans. A ballot was then taken, the scrutineers being Wm. Eaton Mousley, Esq., for Mr. Gisborne; Mr. Burroughs for Mr. S. W. Fearn; the Rev. R. M. Hope for Mr. S. H. Evans.

The ballot was closed at four o'clock, when the Chairman announced the numbers as follows:—

For Mr. Gisborne	134
Mr. S. W. Fearn	55
Mr. S. H. Evans	37

The Chairman then declared Mr. Gisborne duly elected.

THE CHOLERA AT NEW YORK.

The deaths by cholera in New York are on the decrease. The packet ship *Oxford*, arrived at New York, lost twenty-one by the disease; the packet ship *Sheridan*, thirty-one; and the emigrant ship *Jersey*, ten.

ORDERS FROM THE BOARD OF HEALTH ON THE PREVENTION OF DISEASE.

A recent number of the *Gazette* contains a series of instructions issued by the General Board of Health to the Board of Guardians of the Stepney Union, and of the Holborn Union, to appoint medical or other qualified persons to carry out a system of house-to-house visitation, to provide places for the reception of the families of necessitous persons attacked with cholera, and to see to the cleansing of the houses from which they may have been removed; also, that notice shall be given by handbills of the places where medical and other assistance may be procured. The guardians of the poor in Bethnal Green, and in the parish of St. Leonard, Shoreditch, are, by similar notices, directed to provide staffs of men, and the necessary materials for cleansing and lime-washing infected houses, and to secure additional supplies of water for washing courts and other confined localities in their respective parishes.

FREQUENCY OF POISONING BY ARSENIC.

From the following table, drawn up by Messrs. Chevallier and Boys de Loury, the relative frequency of the use of arsenic (arsenious acid) for criminal purposes in France, will be seen at one glance:—

Arsenious acid	- 31	Opium	- 1
Acetate of copper	- 7	Acetate of lead	- 1
Cantharides	- 5	Cerussa	- 1
Corrosive sublimate	- 5	Sulphuric acid	- 1
Nux vomica	- 4	Sulphate of zinc	- 1
Fly powder	- 3	Mercurial ointment	- 1
Nitric acid	- 2	Undetermined nature of	- 1
Sulphuret of arsenic	- 1	poison	- 1
Tartar emetic	- 1		

TRIBUTE OF RESPECT.

The Association of District Medical Officers of Liverpool on Wednesday last presented Mr. Cripps, of Soho Street, with an elegant silver salver, designed by Mr. Mayor, Lord Street; it is of the most exquisite workmanship, and bears the following inscription:—"Presented to Frederick Cripps, Esq., by the Medical Officers of Liverpool, as a mark of their esteem for services rendered by him in the capacity of President of their Association. August, MDCCCXLIX."

Liverpool Mail, Sept. 8.

ST. THOMAS'S HOSPITAL.

The vacancy in the office of Physician to St. Thomas's Hospital, occasioned by the death of Dr. Henry Burton, has been filled up by the appointment of Dr. J. Risdon Bennett, one of the assistant physicians.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Members on Thursday, Sept. 6th, 1849:—Thos. Stokes Guppy, Sidbury, Devon; Philip Henry Tribe, Bristol; Richard Barwell, Norwich.

OBITUARY.

On the 26th ult., in Dublin, Cusach Roney, Esq., M.D., aged 69.

On the 1st instant, at Stockwell, Surrey, after a few hours illness, Dr. James Leatham Clarke, surgeon, R.N., late of Her Majesty's ship Hydra, in his 41st year.

On the 3rd instant, after a few hours' illness, Michael L. Mason, Esq., surgeon, 5, High Street, Newington, an old and much respected practitioner.

On the 4th instant, John Morgan, surgeon, Ordnance Hospital, Dover, late of Royal Artillery, aged 71.

On the 7th instant, at Tipton, Staffordshire, William John Power, surgeon, 91st Regiment, in the 37th year of his age.

On the 8th instant, in St. James's Square, Dr. Drever, M.D., aged 76.

On the 10th instant, in Dublin, after a few days' illness, Edward D. Tarleton, M.D., A.B., (T.C.D.) aged 40, Physician to the Bath General Hospital.

BOOKS RECEIVED.

The Microscopic Anatomy of the Human Body in Health and Disease, illustrated by numerous drawings in colour. By Arthur Hill Hassall, M.B. London: Samuel Highley. Part XV.

Three Lectures. By F. Plombey, M.D., Ph.D., F.L.S. Maidstone: Hall and Sons.

Monthly Journal and Retrospect of the Medical Sciences, September, 1849.

London Journal of Medicine: a Monthly Review of the Medical Sciences., September, 1849.

On the Mode of Communication of Cholera. By John Snow, M.D. London: John Churchill.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

THE APPOINTMENT OF EDITORS.

To the Worcester Council of the Provincial Medical and Surgical Association.

Gentlemen,—I beg to inform you that the Committee of the Presidents and Vice-Presidents of this Association, appointed at the Anniversary Meeting, at Worcester, to fill up the vacancy occasioned in the office of editor, by the death of Dr. Streeten, have unanimously appointed Dr. Ranking, of Norwich, and Mr. Walsh, of Worcester, conjoint editors of the Journal of the Association.

CHARLES HASTINGS,

President of the Association.

Worcester, September 8, 1849.

SUFFOLK BRANCH.

To the Members of the Suffolk Branch of the Provincial Medical and Surgical Association.

Mr. Bree, the Honorary Secretary, would feel obliged to those gentlemen in his Branch, who have not paid their subscriptions for the current year, or who are in arrears, to forward the amount to him, as he is making up his accounts for the year.

Mr. Bree takes this opportunity also of soliciting subscriptions and donations to the Benevolent Fund. A subscription of five shillings from each member would make up the present great desideratum—i.e., the reserve permanent fund of £2000.

NOTICE TO MEMBERS.

The Secretary presents his compliments to those members of the Provincial Medical and Surgical Association whose Subscriptions remain in Arrear, and begs respectfully to call their attention to the following Law, which was passed unanimously at the Anniversary Meeting, held at Bath, in 1848:—

"If any Member's Subscription remain unpaid twelve months after it shall have become due, the Medical Journal and other publications of the Society shall be withheld from such Member till his arrears be paid."

He earnestly entreats all those gentlemen whose Subscriptions are now in arrear, that they will cause them to be paid, either to himself, or to the Treasurer, Dr. Hastings, without further delay.

JAMES P. SHEPPARD,

Secretary to the Association.

Worcester, August 6th, 1849.

ERRATA.

The paper "On Aneurism of the Aorta," read by Dr. C. H. Kingdon, at Exeter, should have been stated as from *E. P. Pridham, Esq.*

In Dr. Durrant's paper, page 481, first column, line 57, for "palpitation" read "palpation."

TO CORRESPONDENTS.

Labour in Hemiplegia.—Dr. Simpson, of Edinburgh, is engaged in some experiments on the expulsive action of the uterus, after division of the spinal cord. He is anxious to obtain notes of cases of labour, occurring in complication with hemiplegia, and also cases of anencephalous monsters. If any of our readers have the means of complying with his wishes, by forwarding their notes to him, they will be doing a service to science, as well as conferring a favour upon the Professor.

The account of the meeting at Bangor arrived too late for insertion, it will appear in our next number.

Communications have been received from Mr. Roe, Mr. Humphry, Mr. Greenhow, Mr. Hawkes, Dr. Watmough, Mr. Ley, and Mr. Loyd.

It is requested that all letters and communications be sent to J. H. Walsh, Esq., Foregate Street, Worcester. Parcels and books for review may be addressed to the care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

ON OSSEOUS TUMOURS

GROWING FROM THE WALLS OF THE MEATUS
EXTERNUS OF THE EAR,

AND ON THE

ENLARGEMENT OF THE WALLS THEMSELVES;
WITH CASES.

By JOSEPH TOYNBEE, F.R.S.,

Fellow of the Royal College of Surgeons in England, and
one of the Surgeons to the St. George's and St. James's
General Dispensary, London.

However little it may have hitherto attracted the attention of the profession, there is reason to suppose that the growth of osseous tumours in the external meatus of the ear is a disease of no infrequent occurrence. Such tumours may be developed in any portion of the length of the tube, but the part from which they most commonly originate is about the middle third of the passage. In one case, however, noticed below, the tumour extended beyond the outer orifice of the osseous meatus, and could be felt by placing the little finger at the meatus. Occasionally the posterior wall affords the point of origin to the tumour, and then it not unfrequently resembles a simple bulging of the wall. In other cases a similar tumour is developed from the anterior part, and the two protuberances meet and lie in contact in the middle, leaving an inferior and superior triangular space in the place of the original opening of the tube. Sometimes the external surfaces of the tumours are in contact for nearly the entire length, and the only passage is a small orifice below. The tumour may also be developed from the upper surface of the tube, and by gradually increasing in size, almost or quite fill up the passage. Two or more tumours, again, are sometimes developed from various parts of the circumference of the meatus, and, converging towards the centre, fill up nearly the whole cavity.

As far as my opportunities of observation during life has permitted examination, these tumours appear to consist of extremely hard and dense bone. In one case, where a portion of the bone was denuded of membrane, it appeared shining, white, and polished like ivory. In another, where, under the misapprehension that the body was a polypus, caustic had been applied so as to expose the bone, the latter was found to be extremely hard, and devoid of sensibility. In a third instance, where I observed the membrane to be absent, there was a thin layer of cartilage on the surface, beneath which the bone was very hard.

The tumours are usually covered by the lining membrane of the meatus, which is frequently thick, spongy, and less sensitive than is natural. When, by irritation, chronic inflammation is set up, this membrane pours forth a discharge whose odour is most offensive.

The development of these tumours is frequently unattended with any symptoms calculated to attract the attention of the patient, and therefore it is only when by their increase of size they act as an impediment to the passage of sonorous vibrations to the membrana tympani, that the patient is inconvenienced by deafness, and applies for relief. Deafness may result in these cases first from a collection of cerumen or epithelium lodging in, and blocking up, the small passage of the tube left unoccupied by the tumours; secondly, a drop of water may have entered the ear during the ordinary ablutions, and produced the same effect; thirdly, the growth of the tumour may have proceeded unchecked till the entire cavity of the meatus is filled up. In some cases, however, the growth of the tumours produces a feeling of distension in the ear, and weight on that side of the head; while in others again, they appear symptomatic of, and consequent to, exostosis forming in the deeper regions of the ears; as for instance, in the tympanic or vestibular cavities—a condition which I have sometimes met with in the course of my dissections. In three of the cases subsequently cited there seemed great probability of this being the case, and the distressing noises and sense of giddiness may probably have depended upon the pressure exerted on the expansion of the auditory nerve by an exostosis in the vestibule.

The only diseased substances with which the tumours are likely to be confounded are polypi; with very slight attention, however, they may readily be discriminated. When inspected by means of the speculum, the polypus is seen to be darker in colour, and glistening, from being generally lubricated by discharge; the osseous tumour, on the other hand, is white, and though smooth, free from moisture. The base of the polypus also is generally narrow, while that of the osseous tumour is broad. Any doubt, however, is easily removed by the use of the probe, which being pressed against the bony protuberance, at once reveals its nature.

The disease under consideration may be divided into two classes, following the peculiar causes which seem to influence its development.

The first and most common class of cases is that in which the disease appears associated with congestion

of the mucous membrane of the ear, as a result of rather free living. Most of the patients who have consulted me on account of it, were in the habit of partaking freely of wine.

The second class of cases, (including the three last of those appended,) showed symptoms indicative of disease in the cavities containing the expansion of the auditory nerve.

I will now proceed to give some indications of the course of treatment to be pursued. In those cases where the tumours occupy a considerable space in the tube, deafness depending upon the occlusion of the canal by the accumulation of cerumen or epithelium, it is important at once to remove past, and prevent future, accumulations. Where water penetrates into the orifice of the meatus, and fills up the only remaining pervious portion of the tube, wool should be placed in the orifice of the meatus when the patient is washing. Should the membrane covering the tumour, as is not infrequent, be very thick, a certain degree of relief may be afforded by the application of remedies which shall reduce its substance. In one case of this kind I was enabled to increase the size of the tube, and much improve the power of hearing, by applying a solution of nitrate of silver.

In order to diminish the size of the tumour itself, the best remedy is that usually employed by surgeons in osseous growths, viz., iodine. This medicine I have prescribed internally, and have applied it behind the ear, and also to the surface of the tumours, with great advantage. In one case a large tumour was so much reduced as to allow of the passage of sonorous vibrations, and the patient regained in a measure that power of hearing of which he had been for many months deprived.

If further experience should establish the fact that these tumours can be arrested in their progress, especially at that early period when the area of the tube is but slightly diminished, much good may be accomplished, and much suffering relieved. And while there are many weighty objections to attempting the removal of these tumours by operation or by escharotics, there are none to the use of iodine and the other absorbent medicines, from which there is every prospect, by persevering use, of successful results.

In consulting authorities on this interesting subject, the only observations I have found in Kramer are the following:—

"They (Polypi) are even of cartilaginous and bony hardness."

"A stalactite-shaped growth, hung from the superior surface of the meatus, very near the membrana tympani, and was of so remarkable a bony hardness and density, that it was impossible to pierce it even with the sharpest knife."*

Itard, although he states that the principal causes of the diminution of the external auditory meatus are the enlargement of the osseous, cartilaginous, and membranous structures, forming the meatus, says:—"I have never had an opportunity of observing the

enlargement (*gonflement*) of the osseous part of the external meatus, and the extreme hardness which it possesses would tend to make this kind of alteration very rare."

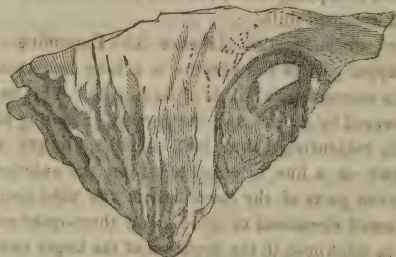
CASES.

CASE I.—*Tumours in each ear attended by deafness: tumours diminished in size: deafness cured.*

June 1848.—D. N., aged 65, for the last few weeks has been feeling somewhat deaf, especially in the left ear. This deafness is increased by an attack of cold, to which the patient is subject.

Right ear.—Meatus partially filled with long growths; (*Figure 1*) one rising from the anterior, the other from the posterior part of the meatus. Membrana tympani dull. Hearing distance less than that of a healthy ear.

Fig. 1.



Left ear.—Meatus blocked up, except a small orifice the size of a crow-quill, by long tumours, which project from the walls of the meatus. (*Figure 2*.) The space left between these bony growths was occupied by a collection of cerumen, which being removed, the power of hearing was to a certain extent improved, though it was still deficient.

Fig. 2.



Considering that every attack of cold increased the deafness, and that the membrana tympani was dull, a thickened state of the mucous membrane seemed also indicated. I therefore resorted to the following course of treatment:—Alterative doses of blue pill were administered, and the surface of the meatus was washed with a solution of Argenti Nitras, one drachm to the ounce, every fourth or fifth, and afterwards every

* On the Nature and Treatment of Diseases of the Ear. Longman, 1847, p. 117.

+ Traite des Maladies de l'Oreille et de l'Audition, 1821. Tome i., p. 338.

seventh day. This course of treatment was continued for three or four weeks, and the power of hearing was largely extended. The plan was resumed the following year, and the ultimate result was a perceptible diminution of the tumour, arising, as I believe, from a decrease in the thickness of the investing membrane; and the power of hearing was completely restored.

CASE II.—Tumours in both ears: deafness produced by the presence of a drop of water in the meatus.

July 1846.—E. F., aged 60, has been so deaf in the right ear for some years, as to derive little use from it. Has several times lately become suddenly so deaf in the left ear, as scarcely to be able to hear a conversation. These attacks have usually come on in a morning after washing, and frequently lasted for some hours.

Right ear.—Two long tumours were observed in the meatus occupying about one half of its calibre. Membrana tympani dull.

Left ear.—Meatus. (Figure 3.) Extending from the upper part of the meatus is a long bony tumour, which occupies two-thirds of its calibre. This tumour is covered by a thick soft membrane, excepting at one point, measuring about half a line in length and a quarter of a line in breadth. From the anterior and posterior parts of the lower half of the tube projected two small elevations of bone about three-quarters of a line in thickness, in the direction of the larger tumours, so as to leave but a very small triangular space between them. The latter was the only opening by which the sonorous undulations could pass to the membrana tympani, and it was found that during the operation of washing, this space was liable to be filled up by water, and temporary deafness produced. I had not an opportunity of carrying out a course of treatment for the diminution of the tumours; but by adopting means to prevent the entrance of water into the meatus, the attacks of deafness were entirely prevented.

Fig. 3.

Fig. 4.



several attacks of pain in the left ear since that period, which have been accompanied by beating and singing.

About six months ago, being then in the West Indies, had an attack of pain in the right ear, which was followed by a diminution in the power of hearing; but there was no discharge. Two months since returned to England, when he recovered the use of the right ear entirely; the left ear being also improved. Within the last four days pain came on in the left ear and rapidly increased, followed by pain in the right ear, and so great an extent of deafness in both ears, as to require him to be shouted to.

Right ear.—Meatus externus. The middle two-thirds of the lower wall are occupied with a bony tumour which fills half the calibre of the tube. (Figure 4.)

Left ear.—Meatus externus red and covered by discharge. Membrana tympani white, soft, and thick, with a small orifice, through which air passes.

CASE IV.—Osseous tumours in each ear; feeling of confusion in the head.

Nov. 4th, 1848.—T. T., aged 38. Last year deafness gradually came on in the left ear, with occasional attacks of deafness in the right. The deafness has of late considerably increased, and been attended also with a feeling of confusion and a sense of oppression in the head.

Right ear.—Projecting from the whole of the anterior and posterior surfaces of the external meatus are two osseous growths, which meet in contact in the centre of the tube. (Figure 5.) Hearing distance one foot.*

Left ear.—Two similar tumours exist also in the meatus of this ear, but at the superior part they have so increased as to be in contact throughout, save a small orifice at the lower part. (Figure 6.) The deafness in this ear has been greatly increased by the presence of a small quantity of cerumen which had filled up the small orifice just described. The deafness was temporarily relieved by the removal of the cerumen, but it was evident that the tumours would go on increasing until the entire passage of the meatus was blocked, unless remedial measures were at once adopted. No opportunity was, however, afforded me of attempting to carry them out.

Fig. 5.

Fig. 6.

Fig. 7.



CASE V.—Large tumour in left ear, causing deafness, diminished by the use of iodine.

February, 1849.—S. P., aged 17. States that deafness commenced in the left ear about two years and a half ago, and has been gradually progressing, till at length he cannot hear at all with that ear. Sometimes

CASE III.—Tumour in the meatus of the right ear: orifice in membrana tympani of left ear.

Nov. 13, 1845.—P. H., aged 56. Eleven years since, when in Russia, fell asleep in a garden. The next day felt severe pain in the left ear. The pain lasted during fourteen days, when matter was discharged. Has had

* The natural hearing distance, with the watch used, is three feet.

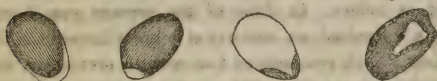
there is a violent itching, followed by discharge, and the tube of the ear is so sensitive that the least touch produces exquisite pain. There is also a continuously unpleasant sensation, as if the ear were being distended. He complains of dulness of hearing in the right ear. Has been to various surgeons and public institutions, but without obtaining any relief.

Right ear healthy.

Left ear.—A large osseous tumour occupies the whole of the meatus, and is attached to its upper part. (*Figure 7.*) It is covered by the mucous lining of the meatus, which is about a third of a line thick.

Tincture of iodine was applied to the surface of the tumour, as also behind the ear, and four grains of iodide of potassium were given thrice daily for between two and three months. Great relief was the result; the size of the tumour diminished (*Figure 8*) the power of hearing greatly increased, the tube of the ear lost its unnatural sensibility, and the unpleasant feeling of distension completely vanished.

Fig. 8. Fig. 9. Fig. 10. Fig. 11.



CASE VI.—*A tumour in the right ear, filling nearly the entire tube; slight protuberances in the left ear.*

Nov. 25th, 1848.—J. S., aged 65. States that ten years ago he had a gathering in the right ear, accompanied by great pain and much discharge. Continued however to hear pretty well from that period till within about a month previous to applying to me, during which he has grown so very deaf that he cannot hear unless the speaker approaches his mouth close to the ear.

Right ear.—The external meatus contained a collection of epithelium, which, having been removed, disclosed an osseous tumour, filling nearly the whole of the tube. The tumour projected from the upper and lateral surfaces, and nearly touched the lower wall of the tube. (*Figure 9.*) Watch not heard in contact with the ear.

Left ear.—The lower wall of the meatus presents two slight elevations, which are quite hard. (*Figure 10.*)

In this case alternative doses of blue pill were prescribed, and tincture of iodine was directed to be applied behind the ears. The result of the treatment, however, has not been communicated to me.

CASE VII.—*Tumour in the right ear, following the extraction of a polypus.*

June, 1847.—Rev. J. D., aged 47, consulted me for a continued discharge from the right ear. He stated that twenty years previously, after the forcible removal of a collection of wax from the right ear, he experienced great pain, which was followed by an offensive discharge, that had lasted to the present time. Upon examination, a large, red, and firm polypus was perceived to occupy the whole of the meatus, nearly as far as the orifice. It was attached to the wall of

the meatus near to the membrana tympani, and on its removal the membrana tympani was found to be very thick and vascular, with a small orifice at its lower part. The discharge wholly disappeared.

In the month of July of the present year the patient again consulted me on account of a slight return of the discharge, accompanied by some degree of pain in the right side of the head, and an unpleasant sensation of fulness and pressure in the ear. Upon inspection the meatus was found diminished to one half its natural size, by the growth of osseous matter from its walls, especially anteriorly and posteriorly (*Figure 11*) thus leaving merely a triangular opening, through which only the central part of the membrana tympani was visible, and that was white and thick.

I recommended the use of a strong solution of Liquor Plumbi to stop the discharge from the tube, and the application of the tincture of iodine behind the ear.

In this case there had been long-standing disease of the tympanic cavity, membrana tympani, and meatus, consequent on local injury. The disease was attended with so great an amount of deafness, that it appeared as if the cavities containing the expansion of the auditory nerve might also be implicated.

CASE VIII.—*A protuberance of the lower wall of the meatus in the left ear.*

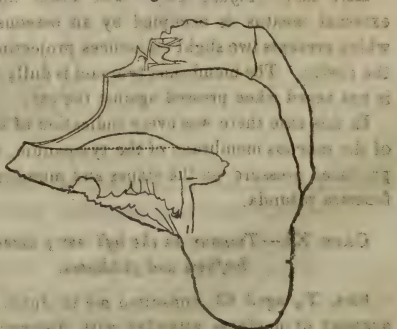
December, 1848.—L. E. H., aged 25. Ten years previously experienced a singing in the left ear, which, during a cold became much worse, and was attended with a feeling of numbness. Has lately suffered from a cold which has aggravated all the symptoms in the left ear, and called forth a noise, like a bell, in the right ear.

Right ear.—Membrana tympani dull. Hearing distance two feet.

Left ear.—Meatus contained a large quantity of cerumen, upon the removal of which the passage was observed to be red. At the lower wall near the membrana tympani, there is a considerable bulging of the osseous wall. (*Figure 12.*) Hearing distance half an inch.

In this case the diminished degree of hearing in the left ear did not depend upon the enlargement of the external meatus, for there was no doubt of a thickening of the mucous membrane lining the tympanic cavity.

Fig. 12.



CASE IX.—Tumour developed after disease in the ear from scarlet fever.

July, 1849.—Miss B., aged 35, of a nervous temperament, consulted me, stating that at two years of age she had scarlet fever in a very violent degree, which was accompanied and succeeded by a violent discharge from both ears, which lasted nearly twenty years. So great a degree of deafness resulted from the fever, that she has ever since required to be spoken to very close to the ear. The left ear is much the worst, and the deafness increases from year to year. During a cold it is so bad that the patient can hear nothing.

Right ear.—Meatus presents, both on the anterior and posterior surface, a bony protuberance, which blocks up a large portion of the cavity of the tube, as in *Figure 11*. Membrana tympani flat, fallen inwards, and lying for the greater part in contact with the promontory, with which it appears to be adherent. Watch only heard when pressed against the ear.

Left ear.—The meatus at the middle portion of its anterior surface has a considerable osseous projection, (*Fig. 13*). The membrana tympani in the same state as that of the right ear. The watch is not to be heard, even in contact with the ear.

In this case there can be no doubt that the effect of the scarlet fever was to produce ulceration in the tympanic cavity, followed by adhesion of its contents to the membrana tympani, and great thickening of its lining membrane, which disease apparently gives origin to the bony tumours.

Fig. 13.



Fig. 14.



CASE X.—Tumour at the lower part of left ear.

June 29th, 1847.—M. L., aged 67. Has been slowly becoming deaf for several years past, and within the last twelve months the deafness, especially in the left ear, has much increased.

July, 1849.—The patient again consulted me, not having in the meanwhile persevered in any plan of treatment. Examination showed the right ear to be much worse, and the left to be so diseased as to be useless.

Right ear.—Meatus dry; membrana tympani dull; watch heard only when in contact with the ear.

Left ear.—(*Figure 14*.) The lower third of the external meatus is occupied by an osseous tumour, which presents two slight eminences projecting towards the cavity. The membrana tympani is dull; the watch is not heard when pressed against the ear.

In this case there was every indication of thickening of the mucous membrane of the tympanum, which had produced pressure on the stapes and membrane of the fenestra rotunda.

CASE XI.—Tumour in the left ear; attended with deafness and giddiness.

Mrs. T., aged 63, consulted me in June, 1844, on account of deafness attended with distressing noises

in the head. When a child, the drum of the right ear was supposed to have been destroyed by the repeated formation of abscesses; the left ear, however, remained in so healthy a state that the diminished power of hearing in the right caused but slight inconvenience. During a cold there was a feeling of deadness in the left ear, with diminished sensibility to sound, and as the cold disappeared, a cracking sound was experienced in the ear; after which the power of hearing seemed quite restored. About twenty years ago, had violent pain deep in the ear, which left the hearing much impaired, and it has only partially returned two or three times since during an attack of ear-ache. About a twelve-month since, a violent noise occurred in and about the left ear, followed by a considerable decrease of the power of hearing.

This state of the head and ear was greatly relieved by the administration of alterative doses of blue pill, and by the use of counter-irritants continued for two or three months, at the end of which time this lady returned into the country and remained well for several months; after which the noises returned as bad as before. In June of the present year I was again consulted on account of a great increase in the noises, which commenced four months previously, and which now prevailed, with scarcely an hour's intermission. There was also great increase of the *muscae volitantes* to which she had long been subject.

Upon examination, I found the power of hearing so much diminished that she required to be addressed close to the ear.

Right ear.—Membrana tympani gone. Mucous membrane of tympanum white and thick.

Left ear.—A bony tumour projects from the anterior surface of the meatus and fills up nearly half the tube, in a similar manner to *Figure 13*. Membrana tympani white.

Counter irritation was directed to be kept up behind the ears by means of a blistering ointment, and the patient has considerably improved.

CASE XII.—Tumour in right external meatus.

D. B., aged 29, consulted me July 6th, 1849. He states that since six or seven years ago the power of hearing has gradually decreased in the left ear, behind which he has been repeatedly blistered. The affection came on after travelling outside a coach, and was attended with singing noises, and at times sounds like thunder. Thinks that the right ear is healthy, as he always makes use of the stethoscope with it.

Upon inspection, the membrana tympani of both ears was found to be quite healthy; the hearing distance, however, with the left ear, considered to be the worst, was five inches; while the right ear was incapable of distinguishing sounds unless the watch was in contact with its outer orifice. At the lower wall of the right external meatus two small tumours were developed, one of which projected from the anterior, and the other from the posterior wall.

WOUND OF THE AORTA THROUGH THE ŒSOPHAGUS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND
SURGICAL JOURNAL.

SIR,

A case of wound of the aorta through the œsophagus, by a piece of bone accidentally swallowed, has recently occurred in my practice, and a brief account of it in the *Journal* may not be uninteresting.

I am, Sir,

Your obedient servant,

W. F. MORGAN,

Surgeon to the Bristol Infirmary.

Bristol, July 21, 1849.

I was sent for late in the evening to a lady, 60 years of age. She was suffering acute shooting pain in the epigastric region, increased by any movement, and especially by the act of deglutition. Pressure by the fingers also increased the pain, but pressure by the hand rather lessened it. She was much distressed, and anxious for relief. There was no other symptom of illness. The pain had commenced suddenly, during her dinner, and was considered by herself and those who were with her to be one of her usual attacks of "spasm in the stomach." It was stated that she had taken some vegetable matter hastily, which lodged for a short time in the chest before it passed into the stomach, but she felt nothing from it except a transient soreness, and it was not until afterwards that the pain came on. In a few minutes vomiting took place, and the pain had continued in spite of mustard poultices and other means. Notwithstanding the conviction of the patient and her friends that it was only one of her old neuralgic seizures, and that it was impossible she could have swallowed any foreign body, I strongly suspected the existence of a pin or something sharp sticking in the upper part of the stomach. The localization of the pain to a point just below the ensiform cartilage, its shooting or pricking character, its aggravation by every movement, and particularly by the act of deglutition, and its first occurrence during dinner, were not improbable grounds for such an inference. She remained much the same for eight days, the pain continuing, more or less, in the same spot, and being of the same character. For two days, however, she was decidedly better, during which period she had a similar pain in the face and shoulders, which rather confirmed the impression that it was a neuralgic attack. The pulse had no increased frequency; the tongue was clean; the skin cool; there was no thirst nor sickness. The only symptoms present were the epigastric pain and anorexia, with want of sleep, from the severity of the pain, although she had large doses of morphia. A variety of treatment was tried in vain. On the morning of the 9th day, as she was leaving her bed for the night table, she became very faint, and fell on the floor. I saw her shortly, and found her almost pulseless, and very pallid. The liberal administration of stimulants somewhat restored her, and then for the

first time since the day of the accident she was sick, and vomited about six ounces of fluid arterial blood; she had also passed from the bowels during syncope a small quantity of dark blood, like treacle in colour and consistence. The pain, which had returned as bad as ever, had now entirely ceased, and excepting a sense of a great weakness, she felt quite well, and wanted food. During the next forty-eight hours she passed three or four motions, consisting chiefly of the same black matter, but there was no return of sickness. She gradually recovered, to a considerable degree, from the state of faintness, enjoyed her food, wanted to sit up, and remained free from pain. During the last night of her life she slept comfortably, and awoke at five in the morning with sickness. She vomited about eight ounces of fluid arterial blood, and immediately expired. Her death took place ten days from the date of the accident, and forty-eight hours from the commencement of syncope.

An examination was readily obtained, which cleared away all doubt as to the nature of the case. The stomach was distended by an immense coagulum of fluid blood, recently effused. The colon was distended, in like manner throughout the whole of its extent, by the same kind of black treacly matter which had passed during life, evidently blood acted upon by the intestinal acids, and probably effused some time before. The small intestines were free from blood. Not the slightest lesion, nor any morbid appearance, could be detected in the stomach or bowels. On slitting up the œsophagus an opening was observed through which a probe could be passed into the descending aorta, an inch below the left subclavian artery, the œsophagus and aorta being close together. The opening was the third of an inch in length, with torn and irregular edges. The wound of the aorta was smaller, and situated rather lower, so as to make the communication somewhat valvular, on the opposite side of the œsophagus was an abrasion of the mucous coat, evidently caused by local injury.

Thus, then, the cause of death was sufficiently manifest. It was clear that a wound had been made by some foreign body lodging in the œsophagus, and perforating the aorta through it. On carefully examining the contents of the stomach and bowels, a small piece of bone was found, which I have little doubt was the cause. It was thin but strong, of an irregular outline, half an inch in length, and a quarter of an inch wide at the centre, becoming narrower at each end. It had been probably longer and more pointed originally.

REMARKS.—In making a few remarks on a case,—to myself one of melancholy interest,—I think it is clear the patient must have swallowed the bone during her dinner on the day when she first experienced the pain. She partook of animal soup and boiled neck of lamb, and most likely the bone accompanied the morsel of vegetable which she said remained for a short time in her chest, and left a transient soreness. It then lodged in the œsophagus, and penetrated its coats, perhaps at once puncturing the aorta also, and doubtless pressed in more and more by the acts of swallowing; there it

remained as a plug, preventing the escape of much blood, until loosened and detached by ulceration on the ninth day, when the syncope came on, coeval with the total cessation of pain. Something then stopped the hæmorrhage for a time, until the second and fatal outbreak. It is remarkable that the pain was uniformly felt, not at the injured part, but some inches lower, in the situation of the stomach. I regret not having thought of examining the condition of the pneumogastric nerves at the wound until it was too late. I think it likely one of them was implicated, and being irritated by the presence of the bone, occasioned pain to be referred to its distal extremity. What would have been the result of the introduction of a probang? Feeling assured that if a foreign body had been swallowed, it had passed into the stomach, where it was beyond the reach of instruments, of course such a proceeding was not adopted. But supposing the symptoms and the conviction of the patient had indicated its lodgement at the spot where it really existed, and led me to make the experiment, what would have followed? I may have dislodged it successfully, and permanently relieved her. On the other hand, an immediate and fatal hæmorrhage may have followed, or the bone may have been pushed in further, and the mischief have appeared to be caused by the instrument, with the not very comfortable reflection that I had been the means of my patient's death. The practical question then arises. In such a case, where a foreign body, sharp, and penetrating the tissues, lodges low down in the œsophagus, out of reach of the finger or extracting instruments, is it safe to endeavour to push it into the stomach, or would it not be better practice to leave it alone, trusting that nature will in time detach it, as I believe generally happens?

The unfortunate issue of the present case is a mere exception; nor do I see that it militates against the practice which I conceive to be the most correct,—viz., not to interfere instrumentally.

I should feel obliged to any gentleman of experience for his opinion upon this question, as it is one of much importance, and one not yet settled. Many practitioners, I believe, pass a probang as a matter of course in all cases, whether the foreign body be sharp and penetrating, or smooth and merely impacted.

PRACTICAL OBSERVATIONS.

By EDWARD JOHN SPRY, Esq., Truro, Surgeon to the Royal Cornwall Infirmary.

(Read at the Annual Meeting of the South-Western Branch of the Provincial Medical and Surgical Association, held at Exeter, July 19th, 1849.)

CASE OF PARTIAL DISLOCATION OF THE CERVICAL VERTEBRÆ, WITH FRACTURE OF THE OS HYOIDES.

On the 17th of July, 1848, I was requested to visit a miner, residing at St. Agnes, who was reported to have "broken his neck." No other particulars were given, and on my journey I was contemplating the

amount of paralysis induced, and how the difficulties of his situation might be best overcome. My surprise was proportionably great when, on arriving at his house, I found him sitting and blowing the fire. I was at first inclined to be angry, considering that I had been brought eight miles to see a case which had been misrepresented, but on hearing the man's narrative of the accident, I was satisfied of the correctness of his assertion, that he had "*put out his neck*." He was a tall muscular man, 60 years of age, and had been for many years employed as a dresser of tin at Wheal Budnick, in Penan.

His head was bent forward, and inclined to the left side. There was a considerable projection on the right side of the neck, which, after a careful examination, appeared to me to be occasioned by a displacement of the right cornu of the os hyoides. He had not been able to swallow anything since the accident except a little water, and that with much difficulty, of which I satisfied myself by desiring him to repeat the experiment in my presence. I then embraced the throat firmly with my finger and thumb, and made steady pressure on the swelling until it yielded, which it did after a short time, with a distinct feeling of crepitus; the natural appearance of the throat was restored, and he could immediately swallow some milk and water without much effort, declaring that the lump was removed from his throat which had hindered him from "clunking fitty." I examined carefully the cervical vertebrae, but could not detect any fracture of the spinous processes. There was a general soreness and stiffness of the neck, which caused him to move his head with great caution. I now revert to the nature of the original accident, and to the means taken on the spot to counteract its effects.

He stated that as he was standing on the edge of the "buddle pit" cleaning the buddle, he overbalanced himself, and fell into the pit, which is in shape a parallelogram, about four feet deep. By the circumstance of the buddle falling with him, he was thrown into an angle of the pit with his head first, and there, would soon have been smothered if some of his comrades near at hand had not fortunately observed the accident, and run to his rescue. On drawing him up, and finding that his head remained on one side, and that he was insensible, they considered he had broken his neck, and immediately proceeded to make extension; and the three men engaged in the process, who are well conducted men, and worthy of credit, assert that they felt the neck "slip in." Soon after this his consciousness returned, he felt some confusion and lightness of his head, but was able with their help to walk a short distance to the counting-house, from which place he was conveyed to his home in a cart.

He informed me that he recollected falling into the pit, and that he fell on his head; that he felt a sudden snap in his neck, and a pain down his back, as if a sword had passed through it; that he had just time to say "my neck is out," but recollected nothing more until he heard one of his comrades say "all right," when he found himself on the ground in their arms.

August 5th.—He states that he went to work on the

eighth day after my visit, and that he has continued to do so to this date, as a dresser of tin; that he has no pain or difficulty in swallowing, but has had pains in his head occasionally, with drowsiness. He can move his head a little from side to side, but if he attempts to do so beyond a certain point, he has immediately a fulness in the fore-part of his head. The throat has retained its natural form, and the right cornu of the os hyoides is in its proper position.

This person told me that he knew two cases similar to his own, in which the parties recovered perfectly after the head had been pulled back; one, a lad of 14, who made a summerset when jumping off a hedge on some straw; and the other was a mason, aged 24, who fell off a high boiler which he was surrounding with brick work.

June 20th, 1849.—This man visited me at Truro, on account of some trifling ailment, which afforded me the opportunity of seeing that he was in very good health. He is a very temperate man, and still works at Wheel Budnick.

THE BALSAM OF PERU AS AN APPLICATION TO INDOLENT ULCERS.

I wish to mention that I have found the *balsam* of very great use in several cases of indolent ulcerations of the legs and other parts of the body. Lint soaked in it is to be applied to the surfaces every morning, a piece of oiled silk of corresponding size is placed over this, some soft rag to fill up the hollow, and a well-applied roller over the whole. In one case especially, of old ulceration of many year's standing, which surrounded two-thirds of the leg of a man who came into the infirmary for the purpose of having his leg amputated, and which, in the opinion of some of my colleagues could not be saved, the *balsam* excited the growth of granulations over the whole surface so rapidly as to surprise us all, the deep sharply-defined ulcer filled up, and with a little modification of treatment from time to time, proceeded very favourably to cicatrization.

An obstinate case of lupus or noli me tangere was very much benefitted, and finally healed, under similar treatment.

CASE OF HORNY EXCRESCENCE FROM THE PREPUCE, CURED BY APPLICATION OF THE SESQUICHLORIDE OF ANTIMONY.

A miner, aged 37, applied to me in January, 1849, for the relief of a most troublesome and inconvenient growth of horny excrescences from the prepuce and glans penis.

The prepuce was retracted, and from two-thirds of its circumference there arose a number of acuminate growths of horny matter, varying in size from the ordinary warty fissure to the length of large grains of the secale cornutum, (the slight incurvation of which they very much resembled,) presenting a most formidable *chevaux de frize*. The prepuce itself was covered with flattened patches of the same horny material, so that I could cut off slices of the induration in several places.

The poor fellow stated that he had a phymosis from

childhood, probably congenital, but that it occasioned him no inconvenience until September, 1847, although he had then been married about ten years. That he then first observed a warty growth on the upper and outer part of the prepuce, which caused inflammation of it, and suppuration of its tissue. That this swelling remaining obstinate, and more warts making their appearance, he applied to a surgeon, who very properly slit up the prepuce, and in due time excised the warts. That about a month after the healing of the surfaces warts again made their appearance, and grew very fast, so that he submitted to excision a second time. That after the second operation the surfaces never healed, but that the warty excrescences waxed larger and longer, until they presented the monstrous dimensions above described.

He begged I would do something "to kill the growths" of these troublesome appendages, but at the same time declared he would not be cut any more. I then told him that if he would bear the pain I could apply something that would burn them down, to which he readily assented, and I proceeded to apply with a brush the sesquichloride of antimony, commonly called butter of antimony, and a most powerful escharotic it is. It occasioned, of course, severe pain for fifteen or twenty minutes after its application, but the effect of it was almost magical; several of the largest growths fell off after the first use of it, and three or four paintings sufficed to reduce the whole to a smooth surface, with which state of things he was very much delighted. He seriously affirmed that he never had contracted a gonorrhœa, and that the morbid growth was spontaneous.

[We have invariably found the application of corrosive sublimate in fine powder (for a few minutes, after the expiration of which it is to be carefully washed off), more efficacious than any other remedy; indeed, in our hands, it has never failed.—Ed. J.]

CLINICAL REMARKS

ON A CASE OF ASCITES,

IN WHICH PARACENTESIS WAS PERFORMED WITH
A SUCCESSFUL RESULT.

By P. MARTIN DUNCAN, M.D., Physician to the
Essex and Colchester Hospital.

CASE.—Susan Wildman, aged 19, unmarried, had been an invalid for eighteen months when I first saw her as an in-patient at the Colchester Hospital; previously she had had tolerably good health, but the catamenia had never appeared.

The first symptom she complained of was a darting and frequently dull and prolonged pain over the left ovary, with general *malaise*; after awhile the pain became constant, was increased by pressure, and by her standing perfectly upright. In spite of remedial measures her abdomen began to swell inferiorly, but not, as far as she can remember, more on one side than on the other. In this state she presented herself as an out-patient at this hospital. After a lapse of time the

swelling gradually increased, and on December 15th, 1848, she came under my care.

She is a short, hearty-looking girl, and but for a much enlarged abdomen, looks in perfect health; her face is ruddy, eyes bright, and tongue clean, but rather redder than usual; the abdomen is many times its natural size, the umbilicus nearly touching her knees as she sits, and distinct fluctuation is evident over the whole abdomen; superiorly, and near the epigastrium, the sound on percussion is more drum-like and tympanitic than lower down; the umbilicus itself is not prominent, nor are the superficial veins much enlarged; no trace of any diminution in, or increase of, the bulk of the liver, is to be detected; she has never had jaundice or ague, and her motions are natural as regards colour and regularity; the urine is copious, generally pale, and contains lithates, but neither albumen nor fatty epithelium; she had scarlet fever when a child, but has not had any kind of cutaneous disorder of late; has no cough; does not suffer from palpitation, but on account of her large size complains of dyspnoea on reclining; the lungs and heart are healthy; no pain is felt on pressing the abdomen; no tumour is to be discovered, and the catamenia have not appeared; the skin is cool, and slightly moist, and that of the abdomen is not of a higher temperature than that of the general surface.

She has been under the influence of mercury. Ordered middle diet. R. Pil. Hydrarg., gr. iij.; Pulv. Scillæ, gr. ij.; Pulv. Digitalis, gr. ij. Misce fiat pil. j., omni nocte sumenda.—R. Decoct. Scoparii, oz. iij.; Sp. Æth. Nitr., dr. iij.; Tinct. Scillæ, dr. iss.; Tinct. Digitalis, dr. ss. Misce fiat mistura, cujus capeat cochlearia duo majora ter in die.

December 17th.—Is much the same; has passed more urine than usual; no diminution in point of size. Hot-air baths every night. Continue medicine.

20th.—Fancies she is a little smaller, but measurement proves to the contrary. Pergat.

22nd.—Much the same, bowels confined. Pergat.

25th.—No alteration. Omit pil. Cap. Elaterii, gr. $\frac{1}{2}$ th, omni nocte. Mist. et Balneum.

27th.—Has had several copious evacuations; feels lighter. Pergat.

30th.—Much the same.

January 2nd.—Is rather weak; elaterium acts well. Omit hot-air bath.

5th.—Feels weaker; the ascites has not gained upon her for the last ten days. Tongue red; pulse 109, weak and irritable. Omit med. omnia.

17th.—Has felt better since she has left off her medicine, but has increased in size. Bowels open, urine copious.

19th.—Complains of cough and dyspnoea; has sensibly increased during the last few days. R. Mist. Camph., oz. vss.; Tinct. Scillæ, dr. iss.; Tinct. Hyoscy., dr. iij. Misce. Fiat Mist. cuj. cap. coch. ij. mag. ter.

She remained in *statu quo*, until the 10th of Feb., when she suffered some considerable pain over the sacrum. Hoping that it was symptomatic of the approach of the catamenia, I gave her mustard, foot and-hip, baths, and aloetic purges. The pain remained

for five days and then increased in severity, and was relieved by a blister.

February 17th.—At my solicitation, my colleague, Mr. Nunn, performed the operation of paracentesis and abstracted a large quantity of pale straw-coloured fluid. She had no bad after-symptoms, (no tumour became evident,) and in a few days she walked about the ward. She was discharged convalescent in March.

In June she came to see me, the catamenia have appeared, she is healthy, has no symptom of ascites, and is now able to earn her bread as a factory girl.

REMARKS.—I believe it is very rare for the operation of paracentesis abdominis to be anything more than a palliative measure. In this case it was clearly the means by which the ascites was cured, but it is evident that the success was determined by the cause of the serous effusion.

There were no symptoms of cardiac or renal disease, and the previous history and the general appearance, contradicted all ideas tending to the probability of there being any obstacle to the passage of blood through the liver.

There were no symptoms of general peritonitis; but pain over the situation of the left ovary existed, with deficiency of the menstrual flux, previously to the appearance of any abdominal swelling. Such symptoms are common enough, are to be referred to congestion of the ovary, and are usually relieved by the discharge of the monthly flux, the congestion being hardly abnormal. In this case I take it that instead of the congestion being relieved by the discharge from the mucous surface of the uterus, the peritoneal covering of the ovary took on an unusual function, serum transuded into the general peritoneal cavity, and relieved the tension of the vessels in its immediate neighbourhood.

At each monthly period for some time fresh effusion occurred, the general loss of tone of the system preventing its total reabsorption; by-and-by the effusion increased to such a degree by successive depositions, that the chances of its absorption, by the means usually employed by nature, became much diminished, and after many months, powerful drastics, diuretics, and diaphoretics, hardly prevented any further accumulation. All now depended upon the diagnosis. If the above view of the case happened to be correct, paracentesis might be recommended, and a good prospect of cure held out, but if the fluctuation depended upon the presence of fluid in a diseased ovary, although the operation might relieve, no permanent benefit could be expected to accrue from it.

The commencement of the disease with pain in one side, accompanied by more or less tremor, and the general state of the health, tended to the idea of the dropsy being ovarian, but occasionally the drum-like sound of intestine could be heard, by carefully percussing above the umbilicus, and when she had reclined upon one side for some time, it became evident over the other. The idea of there being a collection of fluid within a cyst was then hardly tenable. The operation was decided upon, and performed, with a successful

result; and the general health being improved by good diet and country air, the peritoneal surface of the ovary no longer relieved the hyperæmic condition of the organ, the uterus took on its proper function, and speedy restoration to health supervened.

The propriety of attending seriously to the symptoms of congestion of one or both ovaries, as rendered evident by throbbing pain a little above the centre of Poupart's ligament, accompanied by tenderness on pressure, and increased by the erect posture, ought to be strongly insisted on. Whether the pain be constant or intermittent, returning at, or exacerbated during the monthly crisis, accompanied by menorrhagia, or coexisting with amenorrhœa and chlorosis, it should receive our urgent consideration; for when an organ has been congested for any length of time, such a state is difficult of eradication, morbid changes rapidly occur, and irremediable mischief results.

Theoretical as well as practical data lead us to suppose that ovarian disease may be prevented, in many cases, by the timely exhibition of remedies to the system generally, and local applications, as in the above-mentioned case.

CURIOUS SECRETION OF BLACK MATTER BY THE MEIBOMIAN GLANDS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND
SURGICAL JOURNAL.

SIR,

The following case appears to me worthy of record, more perhaps from its great singularity, than from any practical value connected with it. If you agree in this opinion, perhaps you will kindly insert it in an early number of the *Journal*.

I am, Sir,

Yours obediently,

THOMAS HEWLETT.

Harrow, August 18, 1849.

On the 8th of July last, Mr. G.,—"a Harrow boy,"—aged 16, came to consult me on the condition of his eyes. He complained that the eyes were painful, hot, and that everything looked dark. On examining the organs, I found conjunctival inflammation, with some congestion at the back of the globe. The lids, especially the lower, appeared externally as though they had been smeared with some black substance, and on exposing the inner surface of the lower lid, I found it covered with the same material. I questioned him very closely as to whether he had been engaged with any substance of this dark colour; but he assured me he could in no way account for this odd appearance, which had existed three or four days. A few leeches, with blisters behind the ears, soon reduced the inflammatory condition, but the discharge remained; it exactly resembled a little lamp black, mixed with mucilage. Never having met with or heard of such a case, I took him to a surgeon of first rate eminence in town, who, from his former connection with a large

ophthalmic hospital, had had considerable experience in eye cases. He thought the case very singular, and had never seen or heard of one like it. He was at first disposed to believe some deception had been practised, but I assured him there was no conceivable motive for such a practice, and the boy's character was irreproachable. He then examined the eye with a lens, when each meibomian gland could be readily distinguished, filled with this dark matter. A zinc lotion, with some diluted citron ointment, was directed to be applied, and the boy was to be placed under strict observation. This was easily accomplished, but any suspicion detrimental to his character was not established. The discharge continued some days, but gradually disappeared, leaving for some time afterwards, eight or ten of the meibomian canals still prominent, and loaded with this dark matter. The vision became clear, as the discharge diminished.

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER
THE CARE OF PROFESSOR SANDS COX, F.R.S.,
SENIOR SURGEON.

Reported by THOMAS WHITTALL, Esq., Resident
Medical Officer.

CASE I.

SECONDARY SYPHILIS.

John Williams, aged 26, a discharged soldier, of a pale, wan, and unhealthy appearance, and intemperate habits, admitted October 1st, complaining of an inflamed and sloughing ulcer upon the right leg, about the size of a crown piece, the tissues surrounding which are reddened and painful. General health is bad, and the patient complains of great debility. Has had sore-throat frequently, without exposure to previous cold, but has none at the present time. Complains of pains in the shin bones, and in the arms, which are described as resembling those of rheumatism; these pains are not constant, being more severe at night, but comparatively easy in the morning. The tibia appears to be enlarged at the seat of the pain.

History.—The patient had venereal sores upon the glans penis about two years ago, for which he was under surgical treatment, during which his gums were made sore with mercury, and the chancre was healed in a short time. Since that time he has had gonorrhœa. Since the sores upon the penis were healed, he has experienced pains about his limbs, (more especially in the right leg, about the locality where the ulcer exists,) which he describes as being rheumatic. He was under treatment in the hospital, previous to his discharge from the regiment, for rheumatism, without benefit. The skin first began to ulcerate about February last. Ulcer to be poulticed.

October 4th.—Ulcer is in about the same state as when last noted.

7th.—Complains of, considerable pain, (described as rheumatic,) about the wrist and other joints; believes himself to have taken cold from exposure to draught. Bowels are confined. The slough has not separated from the ulcer, and the surrounding tissues are still inflamed. Continue poultice. R. Lin. Sap. Co., Sp. Ammon. Aromat. utr. dr. ij. Ft. Lin. App. part affec.—R. Pulv. Ipecac. Co., gr. viij. Capiat horâ somni.—R. Mist. Salinæ, oz. viij; Vin. Sem. Colch., dr. ij. M. Capiat. oz. iss., ter in die.

10th.—Bowels are freely opened; slough has not yet come away; pains in the joints are not so violent. Cont. omnia.

15th.—Pains are abated; slough has separated from the ulcer, leaving a florrid red surface; the thigh of the left leg presents at various points an inflamed appearance, as though on the point of ulceration. Cont. omnia. The thigh to be poulticed.

18th.—Pains are relieved; patient feels stronger; the surface of the ulcer has begun to throw out granulations; the inflamed surfaces on the left thigh, noted on the 15th, are not so painful as they were at that time. Cont. Mist. et Pulv. Ulcer to be dressed with dry lint.

21st.—Continues improving.

24th.—Pains have entirely disappeared; granulations are healthy, and the patient feels his general health improving. Cont. omnia.

30th.—Has had a slight discharge of gleet matter from the urethra; one of the testicles has become extremely painful, and is much swollen, and the scrotum reddened and inflamed; patient complains of headache and nausea, also of violent pain in the loins; the pulse is hard and frequent; urine scanty; the skin hot and dry. He states that he has frequently had a similar discharge from the urethra, followed by pain and swelling of the same testicle as that now affected, but the pain has never been so violent as it is on this attack; that the first time he was thus attacked was soon after he was affected with gonorrhœa, and that this testicle has always been larger than the other since that time. The surface of the ulcer upon the leg, and the surrounding skin, have an inflamed appearance. To have eight leeches applied to the testicle, afterwards to apply Lotio Plumbi constantly. R. Mist. Salin. oz. j., ter die. Ulcer to be poulticed.

November 2nd.—Swelling of the testicle has diminished; febrile symptoms less violent, and the ulcer has not such an inflamed character. Cont. Omnia.

4th.—Febrile symptoms have disappeared; testicle is smaller, and there is but little pain; the ulcer is still inflamed, and the inflamed surfaces upon the left thigh have now ulcerated; the pains in the bones have again appeared; bowels costive. R. Hydrag. Chlor., gr. ij.; Extr. Col. Co., scr. ss. Sumat statim.—R. Mist. Purg., oz. viij; Tinct. Jalap., dr. ij.; Capiat. oz. j., ter in die.

9th.—Bowels are freely opened; granulations pale and progress slowly; pains in the bones have diminished. Cont. Mist. Ordered to rub about half a drachm of Ung. Hyd. Fort. into the inner side of the thigh.

12th.—Pains in the bones have disappeared; testicle has assumed the same size as that which it had previous to its last attack, and the patient reports himself to feel stronger; granulations are somewhat more healthy.

14th.—Granulations proceeding favourably; the mercury has slightly affected the gums, as indicated by soreness, and the peculiar metallic taste in the mouth. To discontinue the mercurial ointment. R. Pot. Bicar., dr. j.; Pot. Iod., scr. ij.; Tinct. Hyoscy. oz. ss.; Inf. Gent. oz. viij. M. Capiat. oz. j., ter in die. To take one or two Pil. Purg. occasionally.

16th.—Patient this morning complains of spasmodic pain in his bowels, with frequent desire to go to stool, but he is not purged; ulcers proceeding favourably. R. Pil. Sap. cum. Opio, gr. v. Sumat statim.

19th.—Pains in bowels and tenesmus have ceased, and the patient reports himself to feel stronger than he has for many weeks past; granulation is proceeding rapidly, and cicatrization has commenced around the edges of the ulcers. Cont. Omnia.

21st.—This morning the patient considers himself able to leave the hospital, and he is, therefore, discharged relieved.

REMARKS.—This case affords an illustration of the varied consequences which sometimes follow syphilitic disease, more especially when occurring in a person of intemperate habits; thus we have pains and nodes in the bones, followed by ulceration; and, lastly, acute testitis, all of which are, doubtless, to be referred to one common cause—the presence of syphilitic virus in the system. The attack of testitis at the time it occurred, renders this case somewhat peculiar, since it is not to be explained by any of the causes which are usually assigned for such attacks. No mechanical injury had been sustained, neither was there any stricture in the urethra; and it is scarcely explainable on the fact of the patient having had gonorrhœa, for in these cases it is generally laid down by surgical writers, that the disease arises from the extension of the inflammation from the urethra to the testicle, while in this case the inflammation must have subsided long previous to the testicle becoming affected, or otherwise we should not expect the discharge to have ceased. At the same time it must be remarked, that there was a peculiar gleet discharge noticed from the urethra a short time before the attack; and the same kind of discharge, (according to the patient's statement,) appeared previous to a similar attack, which had seized him on a former occasion, I think, therefore, we must refer this affection of the testicle to some diseased action in the urethra, but what that action was, there is no evidence to show.

The peculiarities of syphilitic pains in the bones were well marked in this case, in which we find the bones chiefly affected were those of the leg; and the characteristic, though inexplicable, increased severity of pain during the night, followed by remission in the morning, was particularly observed.

It is worthy of remark, that the case did not proceed so favourably previous to, as it did after, the exhibition of mercury; and judging from the circumstances of

the case, and the well-known efficacy of mercury in syphilitic cases, we have strong presumptive evidence, (although of course we cannot positively assert,) that the favourable progress of the case, towards the latter stage of the treatment, is to be attributed to the action of that mineral.

PROVINCIAL

Medical & Surgical Journal.

WEDNESDAY, OCTOBER 3, 1849.

We heartily congratulate our fellow-members of the Provincial Medical and Surgical Association on the formation of a new branch at Bangor, North Wales, the account of the proceedings at which will be found in another page of this Journal. The importance of these auxiliaries to the Parent Association and to the profession at large, is so great, that we think it desirable to place prominently before our readers the peculiar features by which they are distinguished. It must be recollected that there are certain objects for which we are combined, and which have been, until very recently, chiefly carried out by the whole body of members meeting once a year at a point selected for that purpose, and in the intervals by the Central Council. But latterly the members associated in the Branch Societies have determined to meet in their several districts more frequently during the year; and at these meetings papers have been read and matters discussed, in such a way as to do credit to the Parent Association, as well as to raise the reputation of these—the offspring of that body. It would be invidious for us to select any particular reports or papers read at these meetings, but we need only direct attention to the number of our *Journal* published on the 25th of July, containing the proceedings of various branch meetings, in order to show the value and importance of their various efforts to improve the practical as well as scientific knowledge of the profession to which we belong.

The fifth object for which we are associated, (viz., “The maintenance of the honour and respectability of the profession generally, in the provinces, by promoting friendly intercourse and free communication of its members, and by establishing among them the harmony and good feeling which ought ever to characterize a liberal profession,”) must, now that the Society has reached its present numbers, *mainly* depend

upon the branches themselves; for the difficulty experienced by the medical practitioner in leaving his home, will at all times prevent more than a tithe of the whole list of members from meeting even once a year at the general gathering. But the absence from home at the branch meetings seldom need exceed the day on which they are held, and consequently the whole body of members may annually meet two or three times within their respective districts, to carry out this important object, as well as the scientific and practical investigations to which we have previously alluded.

That harmony and good feeling ought ever to characterize the intercourse of the members of a liberal profession, cannot be disputed even by those insidious spirits, who, for the prosecution of their own interested purposes, exert all their energies in scattering the seeds of dissension and strife. Let all discussions, then, be carried on in the same temperate spirit which has hitherto distinguished all the proceedings of the Provincial Association, both in the general and branch meetings, and all our objects will ultimately be carried out. The time is probably approaching, when a bill, affording a degree of reform in our present institutions, will be submitted to the consideration of the whole profession, and unless there be some means of uniting in the common cause, the whole body of provincial practitioners, and of qualifying the opinions of the minority by the recorded expression of the sentiments of the majority, the same fate will be accorded to it as has hitherto been allotted to the efforts of all Medical Reformers.

These are the grounds upon which we hail the dawn of another star in our already extensive firmament, for it is through the efforts of the branches, collectively and individually, that these purposes can be best and most efficiently prosecuted. And by them the reputation of the whole Society may thus be extended beyond the limits of the medical profession, or the country in which it has hitherto flourished.

The period of time which has elapsed since the expression of the opinion of the Lord Chief Baron, that no lunatic should be deprived of his liberty, unless he is dangerous to himself or others, has allowed of a calm and temperate consideration of the whole question. The first impulse of every lover of his species

would certainly be to agree with this dictum from the judicial bench: for no feeling is more strongly implanted in the breast of every inhabitant of this free country, than that almost instinctive impression, which tells us that we are by nature entitled to the enjoyment of our freedom, unless the possession of it is injurious to ourselves or to society at large.

We are inclined to think, that if the only object of the lunatic asylum were the protection of society, or of the individual from his homicidal or suicidal propensities, that nothing but the conviction that he has those propensities strongly developed, could justify his confinement; but when we consider that in all cases of lunacy, even in the most confirmed, the best chance of recovery for the patient is invariably admitted by the profession to consist in his seclusion from his friends, in such a way, and with such appliances, as in most cases only a lunatic asylum can afford, then the voice of humanity itself will pronounce the asylum, if properly conducted, the refuge which is most to be desired.

We leave out of our consideration entirely the difficulty of deciding as to the probability or the possibility of any lunatic, apparently harmless, becoming suddenly homicidal, (although we are fully aware, from practical experience, of the nature of this difficulty,) because we cannot conscientiously approve of the incarceration of any individual, on the remote ground that he *may* become injurious to himself or others. But who can say, that in the case of Miss Nottidge, she was, when restored to her liberty, and in the full enjoyment of the society of Mr. Prince, in "the Agapemone" or abode of love, as likely to recover the possession of her intellects, as she would have been under the care of Dr. Stilwell? As regards the individual, then, we cannot think the Commissioners, in her case, exercised a sound discretion by ordering her liberation, for believing her still insane, and believing also that Dr. Stilwell's asylum is conducted on humane and scientific principles, they deprived her of her best chance of a restoration to a sane state of mind, in comparison with which, her bodily health unless seriously affected, should not weigh a feather. And further, it cannot for a moment be supposed that Miss Nottidge was permanently injured in health by confinement, since she was allowed, until the period of her escape, on the 6th of January, 1848, to walk out unattended, and even made use of this

liberty to leave the Asylum. It was only from the 8th of January to the 15th of May, when she was discharged by the order of the Commissioners, that her health could possibly have suffered, and this period is surely too short to have justified any decision of so important a nature, as that which threw this poor victim of an insane delusion, into the arms of a set of men whose proceedings can only fill our minds with horror and disgust.

From the statement published by Dr. Stilwell, which remains uncontradicted, it appears that Miss Nottidge, while under his care, had all the advantages which could possibly be demanded by the unhappy state of her mind. Dr. Marshall Hall was in constant attendance, and her case was laid before Dr. Conolly, who, together with Drs. Turner, Pritchard, and Hume, fully coincided in approving the treatment adopted. Now, taking this as an extreme instance, and as the one upon which the Chief Baron's opinion has been founded, we maintain, that for the interests of the individual, without reference to the claims of society, no medical man ought, in such a case, to hesitate to sign a certificate of lunacy, or to refuse to state, that in his opinion it was a case adapted for confinement in a lunatic asylum.

After a careful examination of the eloquent remonstrance of Dr. Conolly, with the account given by Dr. Stilwell, and the letter of the Commissioners to the Lord Chancellor, we can confidently recommend our readers to continue their usual practice of entrusting to the professional intendant of a lunatic asylum, all those cases of insanity, whether homicidal, suicidal, or otherwise, which afford the slightest hope of ultimate recovery. The day has happily gone by when we need fear the commission of those cruelties which were formerly but too frequent; and we now expect a greater degree of humanity in the regular servant of the asylum, than we often find in the inexperienced attendant, who is frequently, from fear or passion, induced to have recourse to unnecessary severities. If the Commissioners will only persevere in their task of preventing improper persons from conducting the treatment of the insane, much good may be done; but let no morbid sensibility prevent our using every means in our power to insure our insane patients the most efficient and promising means of recovering their mental faculties; and these, we believe, are most completely afforded in a humanely conducted lunatic asylum.

INQUIRY ON THE OPERATION OF CRANIOTOMY.

To Thomas Radford, Esq., M.D.

DEAR SIR.—It gives me much pleasure to reply to your question respecting the operation of craniotomy; but I must say, that the reason urged by the Editors of the *Provincial Medical and Surgical Journal*—viz., “*To aid you in your design to prove that the Cæsarean section may almost invariably be substituted for the operation of craniotomy,*” does not induce me to add my mite of information on the subject, but just the reverse. I am induced to bear testimony to the superior comparative value of the latter operation.

Either the one or the other must be undertaken by the medical practitioner with feelings of pain, but in this as in other situations in life, it is well for every one when about to undertake and act on some grave and momentous subject, tending to the personal security of another, to place himself for a moment in the situation of the individual upon whom his thoughts are then bent, and ask himself, “*would I undergo that which I now recommend if similarly situated?*” And knowing the fearful mortality in this country, 80 or 90 per cent., I think few would prefer the alternative of running so great a risk.

It is all very well for the moralist and philanthropist—bachelor he may be, who knows not the true value of woman—to argue the question as a matter of religion; there are doubtless many things to be said in its favour. But let it be weighed fairly; let the relative value of adult and foetal existence be taken into consideration, and it staggers me to fancy that any individual can place so little value on the former, as to hazard nine chances to one against it, for the sake of saving that which is at the very time drawing its nourishment from it—which has never had a distinct or separate life, and which is little more than a member of the same.

Thus much for my humble opinion on the subject. I think you will find, at least I trust you will, that the same opinion is general, and that very few indeed will prefer the dangerous Cæsarean section to the simple operation of craniotomy.

I believe that the latter is performed more frequently than it should be, but it is perhaps better thus than that more valuable lives should be sacrificed.

I have performed the operation of craniotomy five times on one woman with deformed pelvis. I have had the opinion of several other medical men on the case, and they all agreed with me in its necessity. The patient did well, without a bad symptom each time. I have also in other cases during my practice, performed the operation three times, and in each case the woman has done well.

I remain, Sir, yours faithfully,

R. LEY.

North Molton, Devon,
Sept. 11, 1849.

[The Cæsarean section has so seldom been performed in this country, that it is hardly fair to compare the mortality consequent upon it, with that resulting from

craniotomy. By a reference, however, to the reports of more than three hundred cases of the latter operation, published by Dr. Churchill and Dr. Robert Lee, it will be found that the average number of deaths was nearly twenty-five per cent., to which may be added twenty per cent. of vesico-vaginal fistula, almost worse than death itself; whilst as far as Dr. Radford's experience in the Cæsarean operation goes, the proportion does not exceed sixty per cent. The objections therefore, upon the ground of danger, are considerably overrated by Mr. Ley; but we think he has himself furnished a strong proof of the necessity of inquiry, which is all that has been contended for, either by Dr. Radford or ourselves. By a reference to his letter it will be seen that he has *five times, in one woman with deformed pelvis*, destroyed the life of the infant by the perforator. Now, it can, we presume, only be from want of inquiry that this could have happened, as the great probability is that the induction of premature labour would, (as soon as the nature of the case was recognized, which it must have been after the first pregnancy) have saved the lives of some of these four infants, without having recourse to the Cæsarean section which he so much deprecates. We have made these remarks, not in a spirit of criticism on Mr. Ley's practice, but simply to show the importance of duly weighing the subject, which has not generally received that attention which we think it merits, although the valuable papers of Dr. Simpson, published in this Journal, have done much in drawing the attention of the profession to it.—Ed. J.]

Proceedings of Societies.

NORTH WALES BRANCH

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

The desirability of entering into connexion with the Provincial Medical and Surgical Association of England, having occurred to some of the medical practitioners in Bangor, circulars were addressed to the profession in North Wales, soliciting their co-operation and presence at a meeting called for the purpose of taking the subject into consideration at an appointed time; and which meeting was held accordingly at the Liverpool Arms Hotel, Bangor, on Wednesday, August 29th, 1849.

There were present, John Roberts, M.D., of Bangor; Thomas Taylor Griffith, Esq., F.R.C.S., Wrexham; John Lloyd, Esq., of Llangeŷni, Esq.; John W. Pring, Esq., of Bangor; D. Kent Jones, Esq., of Llangeŷni; D. Williams, Esq., Surgeon to the Anglesey district of Bangor and Beaumaris Union; D. Hughes, Esq., Surgeon to the Carnarvonshire District of Bangor and Beaumaris Union; Thomas Charles, Esq., Bangor.

Letters approving of, and promising support to, the meeting having been received from many other medical practitioners, were laid on the table.

Mr. Taylor Griffith, Wrexham, was by acclamation elected President of the “North Wales Branch” of the Provincial Medical and Surgical Association of England.

The following gentlemen were nominated as a Council:—John Roberts, M.D.; John Lloyd and J. W. Pring, Esqrs.

Secretaries:—D. Kent Jones; D. Hughes, and D. V. Williams, Esqrs.

The President, having taken the chair, thanked his brethren of the medical profession for the compliment paid to himself, expressing at the same time his warm approbation of the object which brought them together. Medical men had much to complain of and much to contend against; and it was only by co-operating amongst themselves that they could expect to elevate the medical profession to its proper position. With these sentiments, he should be glad to receive any suggestions that might be made in reference to the business of the meeting.

Dr. John Roberts rose, with much satisfaction, to move a resolution in accordance with the sentiments expressed by Mr. Taylor Griffith. With regard to Union Officers, it was felt that their situations are not certain; that they are not properly remunerated; but the great grievance seemed to be that they are placed under the control of Boards of Guardians. To obtaining a remedy for those grievances their efforts should be directed. The College of Physicians and the Apothecaries' Company had promised to assist, but the Royal College of Surgeons have all but refused to petition. He thought best to petition on their own account; a strong application from all the Unions in the kingdom, concisely and graphically putting their case, would be attended to, he thought.

Mr. D. Kent Jones rose to second the resolution so well explained by Dr. Roberts. Union officers had many grievances to complain of, but he hoped that better times were coming, trusting that Government would see the necessity for making some change in their position. He agreed with Dr. Roberts that petitions from each Union would be attended with good results, as having greater weight, and would now read some extracts from a letter addressed to the Poor-Law Board by the Convention of Poor-Law Medical Officers, in which their case, as it appeared to him, was fairly stated:—

"Although your memorialists have expressed the opinion that a Board specially constituted for the supervision, control, and payment of Poor-Law Medical Relief, (now extended to near three millions of her Majesty's subjects in England and Wales,) with the whole cost thereof, derived from the Consolidated Fund, would be the best means to secure justice to the Union Surgeons, and the fullest advantage to the sick-poor, they are willing to waive for the present this view of the subject, under a sense of the difficulties which beset its immediate introduction.

"They beg, however, in the most earnest manner, respectfully to submit to you, that an exercise of the authority and power of the Poor-Law Board, as shown to exist in the citations from the Acts of Parliament, would be equal to such a diminution of their admitted grievances, as might render their tenure of office, and the rigorous performance of their obligation, less painful and humiliating to themselves, and in many ways more beneficial to the suffering poor.

"They, therefore, respectfully suggest—1st, That henceforth the Poor-Law Board should, by a special order, direct that all appointments of medical officers be

as durable as their good conduct, capability, and willingness to continue therein.

"2nd, That the amount of payment be based on a calculation of the number of cases attended in a given district during the past three years; that the fixed salaries be arrived at by determining 6s. 6d. as the average sum to be paid per case throughout the country.

"That the provisions of the Medical Order in 1842, for extras, be enforced in all Unions, and under all circumstances be made binding, except that the operations performed in the house be awarded the same fees allowed to out-door cases. Also, that a special provision be forthwith made to secure a just compensation for the enormous extra labours which are entailed upon the union surgeons through the Board of Health, under its general powers and regulations, more particularly during the presence of cholera or other epidemics."

The case of the Union Medical Officers, continued Mr. Kent Jones, had been received very kindly by some of the Medical Boards—not so, however, by the College of Surgeons. It would, therefore be for the Union Surgeons, assisted by other medical gentlemen, to press their case on the consideration of the government in such a way as to be effectual. He had received a letter from Mr. Lord, of Hampstead, Hon. Secretary to the Convention, who stated that Mr. Cowley, of Winslow, Buckinghamshire, had been very successful in getting up petitions signed by medical men, the gentry, and some of the Guardians—a mode of proceeding which, as the chairman observed, would have more weight. In deference to that intimation he waived the intention of asking the meeting to sign a petition now. He regretted the absence of other medical officers, whose presence might have been expected at a meeting of some importance to the profession certainly. Many were given to making complaints, and he had heard complaints of the conditions as being very hard. And now when those grievances were to be discussed, and might be redressed, he was sorry to find them so slow in coming forward. (Hear, hear.) He begged to second the resolution.

The President, in putting the resolution, suggested a committee to prepare a petition, to be signed by the Chairman on behalf of the meeting; then to have as many separate petitions as possible independently.

Mr. J. W. Pring, moving a resolution, spoke in favour of organized combination, as the best means for obtaining their object.

Mr. D. Hughes, of Bangor, seconded the resolution, expressing his concurrence with the proceedings, which he regarded as an important step towards establishing the independence of the medical profession.

The President, when putting this resolution, spoke of it as giving a wide field for the introduction of any additional measures which might be deemed beneficial and honourable to the profession. Acting individually could not extend beyond the influence of the individual's sphere; and if they wanted to act on a government, it could only be done through organized combination. They all knew the old lesson, the story of the bundle of sticks, and the moral derivable from it. And true it was, that their hope of success must be based on union, the getting up and strengthening an organized confederacy.

Mr. J. Lloyd, in enforcing the necessity for looking after the interest of the medical profession, alluded to

the doings of a Baron de Lion, in Anglesey, some time ago. He doctored the whole population, such was the credulity of the people, and collected a great deal of money. He borrowed money from all his friends in short, and having done so, cut! Inquiries were made after "the Baron," and it was discovered that he was a gentleman's servant, just out of livery, knowing nothing about medicine. (Laughter.) Mr. Lloyd then read the petition, which was adopted.

After some further conversation, leading to the appointment of officers, Mr. Pring moved the marked thanks of the meeting to Mr. Griffith for his kindness in coming so far to meet his juniors, he having one of the largest practices in Wales to attend to.

Dr. John Roberts had much pleasure in seconding the resolution. He looked upon Mr. Griffith's presence as a most auspicious feature in their proceedings. A great deal of ill-will unfortunately existed among the profession, which meetings of this kind would do away with. He looked forward to great and undoubted benefits as results of the step which they had that day taken.

The President returned cordial thanks. The Society would have his best wishes, and he hoped his best exertions. The step they had taken he considered very necessary to the profession.

Mr. Griffith then retired, being obliged to leave, and there being some letters to read, Dr. John Roberts was moved to the chair.

Letters apologizing and accounting for absence were read from Dr. Lloyd Williams and Dr. Cumming, of Denbigh; Mr. Price Roberts, Ruthin; Mr. Richards, Bala; Dr. O. Roberts, St. Asaph; Mr. Walthew, Holyhead, and others, highly approving of the objects of the meeting, and communicating valuable suggestions. Some of the letters covered subscriptions.

The subject of the fund for the temporary relief of medical men in cases of sickness or poverty, of which Mr. Newnham, of Farnham, Kent, is the founder; and another fund for giving annuities to the widows and orphans of medical men, got up by Mr. Daniell, of Newport Pagnell, were introduced and discussed. It was considered by the meeting that the amalgamation of the two would be highly beneficial.

Dr. John Roberts strongly advocated the medical annuity fund. Few medical men, he observed, make a fortune by the profession; and still fewer are hereditarily independent in circumstances.

Thanks were voted to Mr. Lloyd, with whom the proposition originated, for his exertions in the cause.

The meeting then broke up.

The major portion of the gentlemen present dined together at the hotel, when the proceedings had terminated. Many interesting topics connected with the meeting were introduced and discussed with temper and ability; not omitting the destructive cholera. The healths of the gentlemen, who, by their presence or by letter had expressed their good will and sympathy, were cordially toasted, and the party broke up early, returning to their respective homes with the best dispositions towards one another.

SOUTH-EASTERN BRANCH MEETING.

PROVINCIAL MEDICAL & SURGICAL ASSOCIATION.

HELD AT THE

Town Hall, Brighton, Wednesday, June 27, 1849.*

Mr. Trustram mentioned the subject of homeopathy, not as wishing to say anything severe in reprehension of the conduct of the conscientious professor of that mode of medication, but as disapproving most strongly of those practitioners who, considering themselves, and being considered by their brethren of the profession, as having legitimate qualifications, yet did not scruple to attend and prescribe for patients either homœopathically or allopathically, according to any whim or fancy of the patients themselves.

Mr. Trustram therefore desired to submit to the meeting a resolution disapproving of such conduct, in the following form:—

"That this Association highly disapproves of the practice of homœopathy with allopathy by the legitimate members of the medical profession as unbecoming, and inconsistent with the common principles of honesty, and repugnant to every sentiment of professional honour."

Dr. King seconded the resolution, and supported it by appropriate observations, not in this case so much against homœopathy, as adverse to a regular member of the profession practising both systems.

Cases were adduced by other gentlemen, some of them of a ludicrous description, of the futility and failure of homœopathy; and the resolution was adopted.

Dr. King then read the following abstract of an "Essay on Scrofula," originally read before the Brighton and Sussex Medico-Chirurgical Society.

In the following remarks I shall confine myself to a view of *Constitution Scrofula*: the signs by which it is known: the causes in which it originates: its effects in families and individuals: and the physiological and prudential maxims which follow from the preceding statement. (The treatment was explained in a subsequent paper.)

The *Scrofulous Constitution* may be called a defective and abnormal one, consisting in an imperfect state of the vital powers; "the principle of vitality" (whatever that is) causing an imperfect development of the physical structure, both in form and substance. There is an imperfect deposit of bony matter to form the skeleton, and too great a proportion of animal matter. The bones are therefore too soft to hold their contents, when that is required, as in the head; and too soft to support weight and endure force, when that is their office, as in the rest of the body, the spine, ribs, pelvis, and extremities. All the cartilaginous parts are increased in size: the extremities of the long bones are large and soft, and the interstices filled with serum and jelly instead of earthy matter: and the bones are either longer or shorter than the average.

The head bones being soft give way to the pressure of the brain, which is affected more by the influence of gravity than its own vitality, and becomes misshapen. When fluid collects within, the shape is still more affected, and in those who recover, the disfigurement remains for life.

The malar bones are often too prominent, and the lower jaw too large: the palate is often imperfect, and the dentition is tardy, difficult, and irritating: the teeth imperfectly formed, discoloured, friable, only one half enamelled, and readily decay: the two middle upper incisors are often unnaturally large and prominent; the upper lip partakes of the imperfection of the palate, and is often fissured. Frequently the ears are deficient, the cochlea being wanting, and sometimes the internal meatus: the thorax is deficient in size and deformed in shape: the ribs bent in, the sternum protruding and its divisions imperfectly united. The abdomen is too large and protuberant, from the flabbiness of internal parts and abnormal size of organs and mesenterical enlargement. The bones of the spine, partaking of the deficiency of earthy matter, particularly of the phosphates, are too soft to support the head and chest, and yield as well as their ligaments. The sacrum is often pushed towards the pubes, producing a narrow pelvis, and consequently in females, difficult or impossible parturition: the ilia are often twisted: the arms too long or too short for the body, the wrists too swollen, and the hands misshapen. The lower extremities are too long or too short, badly supporting the trunk: the knees larger, the bones badly fitted to each other, forming the knock-knee, or the reverse; the tibia, sometimes the femur, bending beneath its weight, and the feet splay-footed, or club-footed, in various degrees.

The soft parts partake of the same want of vitality. The brain is too large or too small, too soft, pulpy, and heavy in its functions, and liable to effusion from vascular debility: though sometimes its intellectual functions are more active than common, this being the exception, not the rule. The nerves are not so defective in carrying sensations or motions, as the brain is in its functions. The vascular system is generally relaxed and weak, and what used to be called (for want of a better theory) leucophlegmatic: the muscular fibre is weak and relaxed, and wanting in tone and vigour; the hair is generally of a light colour or reddish, and thin in texture, and scanty, and liable to fall off, independent of disease, from a low vitality: the eye has a peculiar expression, generally heavy, languid, inexpressive; whilst sometimes it has an animated expression, of a peculiar kind, known to medical men, and may be called the scrofulous eye; at others it foretells consumption, of itself. As a contrast to other signs of imperfection, the eyelashes are often long and beautiful. The stature varies from the dwarf to the apparent giant, when a boy may be six feet high at fifteen years of age; but such excess in height is never accompanied with corresponding muscular strength and well developed limbs and features; they are always puerile and almost effeminate. The appearance of the child is often that of the little old man: while the appearance of the man

is often that of youth and boyhood without its vigour. Sometimes the child is fresh and plump, with *enbon-point*, and to the artist beautiful; but this hypertrophy of the cellular membrane is delusive and morbid, and often accompanied with organic infirmities, foretelling future disease.

The deposit of tuberculous matter from imperfect assimilation, is one of the most obvious and leading effects of the scrofulous constitution, to which some writers have improperly confined their notion of scrofula. It is only one effect or disease among many which arise from a common constitution. Scrofula not only produces specific diseases, but modifies all which happen in the body in which it exists. Thus, whooping cough, small-pox, measles, scarlet fever, may be fatal in a scrofulous constitution, and harmless in an unscrofulous one.

The specific diseases to which the scrofulous diathesis gives rise, are hydrocephalus, tumours of the brain, tubercle, abscess, fungus, epilepsy, insanity, hysteria, amaurosis, cataract, deafness, otorrhoea, conjunctivitis, lippitudo, lupus, ozæna, coryza; tubercular glands in the neck; diseases of the heart and lungs, of the abdomen, œsophagus, stomach, bowels, pancreas, liver, kidneys, bladder, uterus, mesentery, scalp, skin, joints. Many forms of indigestion, dyspepsia, mal-assimilation, anorexia, general debility, want of tone and power, nervous debility, without organic disease, are modifications of the scrofulous diathesis: so is gout.

Scrofula is supposed to affect one-fifth of mankind: of those who are born scrofulous, one half perish in infancy; of scrofulous fœtuses, one quarter die in utero. Few scrofulous persons live to be married; this seems to be the provision of nature to get rid of the imperfect part of her works. Louis calls phthisis the most relentless enemy of the human race; but he forgets that it is the means of preserving purity of blood and vigour of constitution. Nature does not allow the direct transmission of scrofula to proceed, as a general rule, beyond three or four generations. It is then cut short by phthisis, or some other organic form of scrofula, or by abortion, or by non-conception. The following principles may be laid down as true and fundamental in scrofula, the cases on which they are founded being omitted for brevity, but probably every medical man's experience will assent to their truth.

1. The grand source of the scrofulous constitution is the direct hereditary principle.
2. Scrofula is hereditary in collateral branches, when latent in the direct line.
3. When second marriages take place, if both parents are healthy the children will be healthy; if either parent be scrofulous, the children will be scrofulous.
4. Persons who have been scrofulous in youth may appear to have been cured, and to have grown into good health, but the constitutional taint remains, and the children will be scrofulous.
5. Phthisis is the most fatal form of the scrofulous constitution. Sydenham called it "scrofula of the lungs." Portal considered that congenital phthisis was scrofulous. Bayle and Laennec the same. All cachexia is a form of scrofula.

6. Scrofula and phthisis coexist in the same family. More than half the scrofulous patients have parents or ancestors who died of phthisis. Of eighty-four cases of scrofula in the hospital of St. Louis, at Paris, more than half had phthisical parents: all the patients in that hospital, who died of various forms of scrofula, had tubercles in the lungs.

7. Persons who are scrofulous in childhood sometimes become stronger after puberty: but the taint remains and the children are scrofulous. The parents try to conceal the scrofula of their youth which makes it difficult for the physician to trace the constitution of the child, unless he is clear in his general principles.

8. Parents who do not appear to be scrofulous themselves, but whose brothers or sisters are so, have scrofulous children. The family taint passes through them to the children. Thus scrofula, like gout, is said sometimes to skip a generation.

The scrofulous constitution may be originated independent of hereditary taint.

1. Syphilis is a cause of scrofula. Astruc says, when scrofula is not hereditary it is invariably caused by syphilis. Scrofula attacked the nurse children (foundlings) of Montmorency in France; all the nurses had syphilis; as they were cured the children got well. Another originating cause of scrofula is excessive indulgence and abuse of the sexual instinct. The children of such parents are generally scrofulous. The parent verifies the expression in Job xx. 2, 11, "His bones are full of the sin of his youth." This power of early self-indulgence is one of the curses of hereditary wealth.

3. Another originating cause of scrofula is *premature indulgence of the sexual instinct, and premature marriage*. If the offspring are to be healthy, strong and vigorous, no man ought to marry before the age of twenty-five, or woman before the age of twenty-two or twenty-three. Thesecretion of the seminal fluid, like all other secretions, must be subject to laws which decide its health and vigour. It should not take place too early or be too frequent, and it should be spontaneous,—i. e. the natural result of a healthy organism, not of a mere mental action, or effort of imagination; there is a period of life during which these conditions are complied with, but before and after which they are not. The ancient Germans held it disgraceful to indulge the passion before the age of twenty. The laws of Moses contained particular restrictions on the subject: and it is almost needless to state that the law of Christ inculcates purity of mind, as the grand safeguard against the abuse of this faculty. If premature marriages have been preceded by indulgence, they are still more unfavourable to the offspring; and if by syphilis still more so. The gradual extinction of the higher and aristocratic classes, by the want of direct heirs, is perhaps partly owing to these causes engendering a scrofulous, and therefore perishable constitution. On the other hand the lower classes marry early, not only from instinct, but also to obtain the services of a wife and companion; the physical strength has been deteriorated by low diet and hard labour, and a premature marriage completes the inability to produce a healthy, strong and robust

offspring. The labour of the peasantry is said to be two-thirds too much, and their food two-thirds too little: their food, clothing, and habitations, are calculated to a minimum of sufficiency.

4. Another originating cause of scrofula is marriage too late in life. Debility in early life may, in some degree, be corrected; that of old age cannot. The generative power begins to decline about the age of forty-five. Those who marry late in life may have one or two children strong, but every child is weaker than the preceding one, and the youngest are the weakest. The child of the old man is become a proverb, for visible debility stamped upon its physiognomy. Many of them die at birth. Some are precocious in childhood, and they suddenly fade and become effete and stunted, like the withering and dropping of fresh fruit in autumn: they are born out of due season. The period of weak fecundity in women commences about the age of forty. After this time pregnancy is often a delusion, or there is an imperfect conception or miscarriage, or the child perishes at birth, or if reared it is delicate and scrofulous. When marriage has not been followed by children till after several years, they are generally weak and scrofulous, agreeing with the age of the parents at the time of birth. Children born after the expectation of farther increase of family has ceased, are generally scrofulous.

5. Another cause originating in scrofula is disproportionate age and unequal vigour. When the father is younger than the mother it may be a cause of scrofula. In all animals power is the privilege of the male. The relative superiority of the man ought to be the foundation of marriage. Upon it depends all domestic felicity and often its morality. The constitution of the children follows that of the father more than that of the mother. This is the law in the brute creation. The breeders of cattle set more value upon the male than the female.

6. Another originating cause of scrofula is paralysis, and also epilepsy, lunacy, and other diseases of the brain.

It may be observed that parents may be scrofulous without apparent signs; the scrofula may be latent and the children scrofulous. Parents may show no signs of scrofula till after they have had children, then it may begin to appear. In this way it may be said to skip a generation, when it is latent. During the wars of the French Revolution, when the conscription was at its height, France was so depopulated that every man capable of bearing arms was enlisted, and even many who were incapable. None were left at home but the sick, the infirm, and those who had married at nineteen or earlier in order to avoid the conscription. Hence the population was kept up by persons too infirm and sickly for military service, and too young to produce strong children. Thus at the restoration in 1814, it was found difficult, out of a levy of 80,000 men, to find 25,000 to form a *corps d'élite*, and it was necessary for this purpose to lower the standard of height. After the peace of 1814, when the conscription was less rigorous, the men were more robust. But the conscripts of 1836 were an exception, for they were born in 1816, in which year nine-tenths of the population suffered severely from famine. These facts

are obtained from the reports of the French Secretary at War. The end of marriage is domestic happiness, and the procreation of healthy children; and the former depends much upon the latter. The law is very particular about the forms of marriage, but very indifferent about the results. Rational marriages must rest with the parties themselves. Ignorance of the laws of constitutional health is one great cause of irrational marriages. The great motives to marriage are rank, property, fancy; to these ought to be added morals, intellect, health, which are more important for happiness. The moralist has hitherto been too little of a physiologist. Physiology is the basis of morals as well as of health. The educator ought to be a physiologist as well as a moralist. It is only by the union of the two that the young can be judiciously trained, and prepared for real life. However persons may despise physiological warnings before marriage, they are too sensible of their value afterwards. Constitutional diseases not only produce unhealthy children, but often also disgust, aversion, and misery, between the parties themselves. Marriage will not strengthen a weak constitution, as some suppose, but debilitate it still more. It is a common observation of females, "I have never been well since I married." Child-bearing and nursing demand more than a delicate and tainted constitution can bear. The strength gives way under the heat and burden of the day.

I have thus endeavoured, though too briefly for the importance of the subject, to trace the history of the scrofulous constitution in its hereditary principles, direct and indirect, proximate and remote. Where it exists it cannot be entirely eradicated. Where it does not exist it may be originated by the vices and follies of men. I have considered it as the source of many diseases not hitherto attributed to it; and that its best antidote would be a judicious education and training upon physiological principles. These principles it is the aim and merit of medicine to diffuse among society. The medical voice reaches the highest and lowest ranks. Her useful and practical truths are of daily application, and daily disseminated by her faithful disciples, who in the lower walks of the profession, ever ready by day or night at the call of distress, find their chief and often their only reward in the conscious exercise of the duties of humanity, the *mens sibi conscia recti*. Finally, the greatest compliment which has yet been paid to the medical profession, and its humane and scientific principles, is, to see the whole Legislature, and every populous city in the kingdom, resolve to adopt them as a basis of civil polity, and to carry them out for the health, benefit, and happiness, of the poorest and largest class of our fellow creatures.

At the conclusion of Dr. King's address, the sitting broke up, and the gentlemen present adjourned to dinner: Dr. Jenks, to whom thanks were resolved, in the chair.

Copied from the minutes,

THOMAS MARTIN,

Secretary.

BATH AND BRISTOL BRANCH

OF THE

PROVINCIAL MEDICAL & SURGICAL ASSOCIATION.

Mr. Brittan's Microscopical Investigations in Cholera.

The quarterly meeting of the above Association was held at the York House, Bath, on Thursday, September 27th, Mr. Swayne in the chair. There were present—Drs. Symonds and Trotman, Messrs. Colthurst, Cross, Estlin, Mayor, Pritchard, and Smerdon, of Bristol; Drs. Blackmore, Clarke, Falconer, Hodges, M'Dermot, James Watson, and Tunstall, Messrs. Brace, Barrett, Bartrum, Boulton, Church, Cox, George, Hensley, King, Kilvert, Lloyd, Mason, Skeate, Skinner, Stone, Soden, Terry, Waldron, and Wood, of Bath; Mr. Crouch, of Bruton; Mr. Crang, of Timsbury; Mr. Flower, of Chilcompton; Mr. Washbourne, of Corsbham; Mr. Godfrey, of Yatton; Mr. Jennings, of Laycock; Mr. Vicary, of Warminster; with several other gentlemen.

Mr. Pritchard having been one of the microscopic sub-committee appointed by the Bristol Medico-Chirurgical Society, to investigate the excretions of cholera patients, exhibited several of the bodies recently discovered in these excretions. Of the fifty or sixty cases of cholera in which he had known the ejecta examined, these bodies had been uniformly found; whereas, in no case of diarrhoea, arising from whatever cause unconnected with cholera, had they yet been discovered. They are to be found in the matters voided and vomited, of the well known rice-water colour, especially in the thicker flocculi, which are almost made up of minute, organised, rounded bodies, of so small a size as to require a *very high* microscopic power to investigate. They are found of various sizes and stages; those obtained from the stomach being smaller than those from the intestines. They appear gradually to attain a certain size; the larger, on being pressed, burst, and gave issue to a contained matter, probably the sporules of a new series. Though so minute, they are easily recognised by those accustomed to such pursuits who have once seen them.

Dr. Symonds stated, that the results arrived at by the gentlemen of Bristol, who have been engaged in the microscopic investigation of cholera, might be summed up as follows:—

- 1st. That certain minute bodies have been found, under a very high power, of a peculiar form and appearance, in choleraic discharges, and in no other kind of diarrhoea.
2. That these bodies have a determinate organised form, and that it closely resembles that of the spores and sporules of *fungi*.
3. That similar bodies have been found in the atmosphere of cholera districts.

[This is very important, for on consideration of the features of the last epidemic, Dr. Holland had suggested this theory of its origin in his well-known paper on the subject—a view that has more recently been revived by Dr. Snow—moreover, while they were known only to exist in the excretions of the alimentary canal, it was a question whence they originated.]

4. That they have been detected in water obtained from places infected with cholera.

The gentlemen engaged in these researches being on the eve of publishing their observations, the subject was not more fully gone into.

(To be continued.)

BIRMINGHAM PATHOLOGICAL SOCIETY.*

April 5th, 1849.

Dr. FLETCHER IN THE CHAIR.

Enormous fungoid tumour from the lumbar glands; fungoid tumours of the liver, succeeding disease of the testicle.

Dr. Russell related the following case to the Society:—

In the early part of July, 1848, the patient called to consult Mr. Hodgson. In consequence of Mr. Hodgson's absence he was brought to him (Dr. Russell's) father. He had considerable enlargement of the left testicle, which was the size of a large orange, globular, and very firm to the touch. Its growth had been very gradual. He was a clerk in a manufacturing establishment, aged 43. He was thin and feeble, and prevented by his disease from walking. He suffers from a sense of weight rather than from acute pain. On Mr. Hodgson's return, it was determined to remove the testicle, and the 21st of July was fixed for the operation, but at four, a.m., of that day, the patient was seized with intense pain in the loins, and he was very feverish. He was much relieved by leeches, and as he continued free from any return of pain for more than a fortnight, the testicle was removed on the 8th of August, the uncertainty attending the result of the operation having been fully represented to him. The tunica vaginalis was distended with clear fluid. On opening the tumour after removal, a large quantity of dirty, thick, lumpy fluid, flowed out, leaving a large cavity, which contained pulaceous matter, as if from sloughed structures, but without fecor. The wall of the cavity was, in some parts, nearly an inch thick, and formed very much of thickened tunica albuginea. The lower part of the tumour, however, was quite different in structure, being composed entirely of cysts, from the size of a pea to that of a large hazel nut; their walls thin, and semi-transparent; they were bound together by a fibro-cellular material. The fluid in these cysts was clear and albuminous; the walls of the cysts were shewn by the microscope to be composed entirely of strata of nucleated cells.

The wound was well in a fortnight, but the patient remained feeble; he therefore went to Malvern. On his return home he directed attention to a tumour about the size of a walnut, under Poupart's ligament, of the left side (the side of the diseased testis.) He was very thin and feeble, and suffered great pain in his loins, and in his abdomen. On careful examination on the 28th of November, an irregular hard tumour was discovered in the right hypochondriac region; the tumour in the groin increased, and after lingering in the usual painful state he died March 1st. During his illness Dr. Evans saw him.

Section Cadaveris thirty-six hours after death.—Body extremely emaciated; scrotum healthy; the remaining testicle healthy to the touch; two soft tumours, like buboes, in the left groin. *Chest:* Pleura free from adhesions to the ribs, but both lungs adhered to the pericardium. Pneumonia, in an early stage, of the lower lobe of the left lung; in its second stage at the base of the lower lobe of the right lung. (The process of death had been very protracted.) In all other respects the lungs (which were carefully examined,) were quite

healthy. *Heart:* Traces of old pericarditis, in long cellular adhesions, and white spots. *Abdomen:* Intestines all much contracted; omentum turgid. *Liver* large and pale; by the microscope it was found enormously gorged with fat. In various parts, but chiefly towards the surface, were tumours, some the size of an egg, many smaller, some only the size of a nut. These tumours contained a pulpy matter; in some quite fluid, of a deep blood colour, or of a lighter tinge; they emptied themselves of their contents directly when cut open; they were quite circumscribed. Although some of the tumours were so near the surface as to cause discolouration, there was no lymph on the peritoneal covering. Gall-bladder full of very dark bile. *Spleen* healthy; right kidney healthy. The liver and intestines having been removed, an enormous tumour was perceived, for the first time, lying upon the spinal column, and on the ribs. It occupied all the posterior wall of the abdomen, lying chiefly, however, on the left side of the spine, projecting only to a comparatively small extent to the right side. It pushed the transverse and the descending colon out of their course, and drew them closely over itself. It wedged the spleen tightly against the ribs, driving it as high up as the diaphragm permitted; and the left kidney, which closely adhered to it, was perfectly flattened out and stretched over; below, a short horn passed from the left side of the tumour, along the brim of the pelvis, under Poupart's ligament, to the tumours in the groin. The large vessels, with the common iliacs, were embedded in the tumour. The tumour was composed of like tissue with those in the liver; part was firmer, though very friable, but part soft and diffident. The tumours of the groin were of like structure; the one contained a light tawny fluid, a little thicker than pus; the other a pulpy mass, of a dark blood colour. In the lower end of the left kidney was a collection of matter like that in the tumours of the liver. In the main tumour, and in one of those in the liver which I examined, I found the pulpy matter was contained in a firm cellular meshwork. The pulpy and fluid contents (by the microscope) were found to consist entirely of nucleated cells, mostly irregular in outline, but many nearly spherical. They varied from 1-1100 to 1-2500 inch in diameter; they contained fat globules, in various quantities, some being quite filled with them. There was besides a great abundance of free fat globules.

Lungs extremely emphysematous, with minute miliary tubercles scattered through them; heart enlarged on its right side; tricuspid orifice dilated; other organs much congested.

The subject of this case was a patient of Dr. Evans's, in the General Hospital, and the preparation was presented by Dr. Heslop, with Dr. Evans's permission.

The lungs were universally red and intensely emphysematous; the bronchial tubes very much congested. Throughout the greater portion of the right lung were scattered minute miliary tubercles; the left lung contained a smaller number of the same bodies. The heart was large and flabby. The right auriculo-ventricular orifice was larger than natural, but with this exception, all the orifices and valves were healthy. It was evident that the right side of the heart had undergone most dilatation. The liver was highly engorged, and had been displaced downwards considerably below the ribs. The spleen very large, congested, and exhibited the

* Continued from page 524.

remains of old peritonitis on its lower convex surface. The kidneys were of a deep red hue, from great increase of vascularity. These organs were taken from an Irish boy, aged 17, who had enjoyed good health, notwithstanding hardships of various kinds, up to last Christmas, when he took a sudden cold. He applied as an out-patient to the hospital in the beginning of January, and was then labouring under severe dyspnoea, cough, and expectoration, with a sense of great oppression at the chest. Finding no relief he was admitted into the hospital. The physical signs were these:—Fine mucous râles all over the chest, before and behind, which was clear on percussion in every part. Heart-sounds normal; impulse increased. The pulse was about 120; dyspnoea extreme; face blue; superficial veins of the upper portion of the body distended; expectoration frothy and copious, without any streaks of blood now, or at any former period. A fortnight after admission he appeared considerably relieved, the pulse came down, the dyspnoea less urgent, and the râles became coarser and looser. But the improvement was only temporary; all his former symptoms soon became aggravated; the exertion of uttering a few words caused the greatest embarrassment of the breathing; and a livid crimson hue of the face and neck. The whole chest became remarkably resonant on percussion, with the exception of the right infra-clavicular region, which was considered to be trivially duller than natural. The hepatic dulness extended below the ribs; and now, a few weeks before his death, he began to have profuse night sweats. On the 1st of April he died. Dr. Heslop remarked that in this case we have a clear instance of *acute emphysema*, owing, unquestionably, to the prolonged embarrassment of the respiratory function, from the stasis of the products of the diseased mucous membrane. At what period did the tubercle arise? There is good reason for thinking that this, too, supervened upon the bronchitis of a bad constitution. In spite of the complicating emphysema there was no difficulty in the diagnosis of tubercle. Thus, then, this boy died of an acute bronchitis, passing through tubercle into emphysema.

Apoplexy from rupture of the basilar artery.

Dr. Russell presented the preparation to the Society, which was given him by Mr. Percival, with the details.

March 16th, at 5 p.m., he was called to a man, aged 55, a clock-case maker, of very good general health, muscular and powerful; of temperate habits generally, but with occasional outbreaks, but he had not committed any excesses lately. He was as well as usual, and ate a hearty dinner of pork. Two hours after, he was seized with pain in the head, fell into a state of apoplexy, and was dead in less than half an hour from the attack. Mr. Percival found him dying; he was very pale; both pupils were most perfectly contracted; a large volume of pulse, but it was laboured and irregular. He was quite insensible; no stertor; no convulsions; he had vomited. There was cramp-like contraction of the left foot and leg.

Section Cadaveris sixteen hours after death.—Heart: Its walls rather thick, chiefly in its left ventricle; the cavities natural; it contained a good deal of blood. Some atheromatous deposit on the aortic sigmoid valves, principally on one valve, puckering its edge. Aorta quite free from atheroma. Head: Enormous venous congestion of the pia mater throughout. A large quantity

of blood extravasated on the base of the brain to the extent, as Mr. Percival guessed, of four ounces. It passed into the spinal canal. On washing this away a ruptured orifice in the basilar artery at once appeared; it was about large enough to admit the blunt end of a probe. The large vessels of the base felt soft and pliable. Unfortunately they were not minutely examined. There were some hydatid-like bodies in both choroid plexuses. The cut surfaces of the brain presented a large number of bloody points; the cineritious matter unusually dark; the left hemisphere of the cerebellum also unusually dark.

Dr. Russell remarked that the patient evidently died in the first stage of apoplexy, that of mere shock, before the symptoms of pressure had developed themselves. There was pallor, very small pupils, and no stertor. This was plainly occasioned by the large quantity of blood so suddenly poured out, the largest artery in the brain being ruptured. He also remarked on the very loaded state of the vessels of the membranes, and of the brain, notwithstanding the large quantity of blood poured out, as though some cause tending suddenly to load the vessels with blood to an unusual degree were in operation. He alluded to a like case which he had presented to the Society, in which, with a clot on the base of the brain, the congestion of the pia mater was so great as to force out the blood from the smaller ramifications, causing ecchymosis; the cerebral substance, however, was pale. Another case of the like character is given by Dr. Abercrombie.

Foreign Department.

DIAGNOSTIC SIGNS OF PHLEBITIS.

Among the most interesting of the recent American contributions to medical science, is the following report of a Committee of the New York Pathological Society, to determine the diagnostic signs of portal phlebitis. This Committee reports that on the subject submitted to their consideration, there are two elements; first, the symptoms common to phlebitis in general; and second, those appertaining to the inflammation of the particular vein, and the organs connected with it,—viz., the spleen, liver, and (indirectly and occasionally only,) the lungs. Phlebitis is of two kinds, sub-acute or adhesive,—i.e., leading to obliteration of the vessel; and acute, or that which is attended with the formation of pus within the cavity. In the first, or sub-acute variety, there is but slight general indisposition, but little local pain and tenderness, the vein soon becoming firm and hard, as if it contained solid matter, and dropsy of the parts beyond the trunk commonly ensues. There is reason to believe, however, that a form of this variety may exist, attended with high and sthenic inflammatory action; sometimes, though not necessarily, or even generally, fatal. Dropsy occurs rapidly, and may or may not subside when the establishment of a collateral circulation ensues. In the acute, or suppurative variety, the symptoms are much more severe. The attendant fever is of a typhoid character, depending on the admixture of pus with the circulating fluids, and its deposit in other frequently distant organs,—viz., the liver, lungs, brain, kidneys, spleen, joints, serous cavities, and muscles, whereby new foci of

irritation are created, and new pus poured into the general circulation. According to Schönlein, the typhoid phenomena are peculiar to pus, and as such pathognomonic of the suppurative variety. Another peculiarity is the occurrence of chills. They set in without regularity, so as to cause a continued remittent fever, resembling an erratic intermittent. Several chills may occur per diem, sometimes as many as four or five, and sometimes many days elapse without their occurring. In cases even where the veins of the liver are not inflamed, this organ, the lungs, and the heart, nevertheless frequently take an important part in the characteristics of the disease. There is distension, and even pain of the right hypochondrium, bilious-coated tongue, bitter taste in the mouth, nausea, and even vomiting; and even icterode colour of the skin, conjunctiva, and urine, which becomes brownish-red, and often black. These phenomena are the more marked the nearer the affected vein lies to the liver. The cardiac symptoms consist in signs of inflammation of the right side of the heart, violent pulsation below the ensiform cartilage, violent oppression, great restlessness, and frequent inclination to syncope. These signs are most marked in inflammation of the veins above the diaphragm. In addition to the above symptoms, your committee may mention the occurrence of profuse sweats, and occasionally very unnatural and copious discharges from the bowels. Your committee now proceed to examine whether, symptomatologically, the cases reported as inflammation of the portal vein were really instances of phlebitis. They are six in number,—viz., Drs. Graves, Reynaud, Lambron, and Moses, each one; and Dr. Schönlein two cases; of these, three were suppurative and three adhesive.

Of the cases of the suppurative variety, Lambron's patients at first had a natural pulse, and the tongue was white. In the course of a week it became dry, was loaded with a bluish crust, and the pulse had risen to 96. On the occurrence of pneumonia the pulse became hard and full; in two days after it began to sink, the pulse rising to 104, and being weak and compressible. In Schönlein's first case there was at first violent fever, with burning heat of the skin; pulse 100, full and tense; urine dark and high coloured; tongue had a yellow coating. In the course of the disease the fever moderated for a time, then assumed a hectic character; strength rapidly and remarkably succumbed. In his second case, the tongue at first had a yellowish-brown coating; there was much thirst; pulse varying from 100 to 110; skin burning hot. The fever quickly assumed the typhoid form; the pulse ran up to 128; was weak and compressible; the tongue became brown and dry, and strength failed rapidly. Such is a description of the fever in the three cases of the suppurative variety which have been presented to the Society, and, in the opinion of your committee, they show that, although at first of a sub-acute or acute sthenic character, it is speedily changed into the typhoid form, thus coinciding with the usual phenomena indicated as belonging to phlebitis in general. Respecting the chills, with the suppurative variety, in Lambron's case, the patient, after suffering with some slight and obscure gastric symptoms, was seized with a shivering fit, which did not return under one week. Rigors then recurred frequently, easily simulating a regular intermittent fever; they then ceased to return at the end of

another week. In Schönlein's first case, the patient was seized about the sixth day with a violent shaking chill, which was repeated at uncertain intervals. On some days several occurred, and on one day as many as three; at one time they were absent for eighteen days. In his second case, chills did not set in till the fourth week, occurring at irregular intervals, sometimes two daily, and lasting more than an hour. She had only one interval of twenty-four hours' freedom from chills, which then recurred, and continued daily up to her death, becoming more severe, so that some lasted for twelve hours, and recurred again after the lapse of scarcely six more. Here again we notice the characteristic phenomena of internal suppuration, which your committee would especially indicate to the Society as a pathognomonic sign of the disease in question.

The third point of interest refers to the symptomatic evidences of a deposit of pus in adjacent or distant organs. In Lambron's case, about the twenty-second day, pain in the right side of the chest, cough, crepitant râle, and faint bronchial respiration were perceived. In Schönlein's first case, no deposits took place in any organ; in the second there was pain in the region of the spleen at an early date: the organ was found enlarged and tender about its hilus. Pain and tenderness existed about the liver. About the fifth week of the disease, cough set in, with pain in the chest, and circumscribed crepitant rattle was found in several places about the base of either lung; respiration quickly became oppressed; cough more severe, and sputa rusty and bloody. These two cases, in the opinion of your committee, while they exhibit no evidences of the cardiac affection mentioned by Schönlein, a fact which may depend upon the non-residence of the pus conveyed into that organ, within its cavity, satisfactorily display the common attribute of phlebitis,—namely, the development in organs more or less distant from the seat of the phlebitis, of inflammation dependent upon the stasis within them of the products of the venous phlogosis. These stases are well known to the Society under the name of metastatic abscess. The theory of the formation of these abscesses is so well explained by Dr. Budd in his recent treatise on the Diseases of the Liver, that your committee have thought the paper worthy of being transcribed:—"The globules of the purulent matter, mingled with the blood, are conveyed to the capillary vessels of the lungs, and it would seem, by becoming mechanically arrested there, excite each circumscribed inflammation and abscess. If any of the globules pass through the capillaries of the lungs, to the left side of the heart, they are sent in the arterial current to other organs, and, becoming arrested in the capillaries of these organs, create, as in the lungs, inflammations of limited extent, rapidly passing on to abscess. If the seat of the suppurative phlebitis happen to be one of the veins that go to form the vena portæ, the pus it contains will be carried first to the liver before it be conveyed elsewhere, and then the abscesses will be found alone, or in greatest numbers in that organ."

The non-occurrence of metastatic abscesses in one of these three cases, shows that they are not to be expected in every case of phlebitis, and even when certain bilious symptoms do occur in particular cases, as Schönlein declares, they are not necessarily attributable to the presence of pus in the parenchyma of the

liver, but form a characteristic phenomenon of the disease, independently of any local lesion, and are therefore, of nature, purely sympathetic. In proof of this, Schönlein's first case, in which there were no depôts of pus in the liver, the tongue constantly retained a yellow bilious coating, the urine was always dark brown and impregnated with bile; the skin was at first yellowish, and became of a dirty green; and greenish, brownish, bilious, and offensive matter was discharged from the stomach. The left lobe of the liver became swollen and tender. The value of this observation of Schönlein's, however, in the opinion of your committee, is in this case diminished, by the consideration that it was one of inflammation of an hepatic vein, upon which circumstance the biliary phenomena may in part, if not wholly, have depended. All the three patients who were the subjects of the suppurative inflammation of the portal vein had profuse and viscid sweats; in Lambton's case there were passed dark green fluid stools; in Schönlein's second case, the stools were of a dark yellowish brown, mixed with mucus. Schönlein remarks that when the disease has lasted from four to six weeks, the stools often become black, tar-like, looking as if burnt, and often mixed with blood; and here again your committee would point out the close coincidence of the symptoms of these cases with those described as belonging to phlebitis in general.

Of the general symptoms of portal phlebitis. Of these but one, that seen by our fellow-member, Dr. Moses, was acute in its character, and as the patient was in a state of collapse during the three days that preceded her death, the symptoms indicated nothing pathognomonic of phlebitis, they were simply those of asthenia, but the previous history of the case, jaundice occurring after a fit of passion, fever, the rapid occurrence of œdema pedum, and ascites, with the enlargement of the superficial abdominal veins, might have suggested both the existence of obstructive disease of the vena portæ and cava, and that the closing symptoms in some degree depended upon venous inflammation, though obscured by the more immediate existence of a peritonitis. Your committee believe that the general symptoms are insufficient, in the commencement, to point out with certainty the existence of adhesive phlebitis: fortunately the fatal termination is neither certain nor speedy, and the progress of the case will, generally, ultimately lead to an approximative diagnosis. Schönlein, whose name stands high in Germany, and indeed throughout Europe, as that of a most enlightened and accomplished physician, and to whom we certainly owe most of our knowledge of the disease which now occupies our attention, asserts, that the attending fever is of a peculiarly pungent, burning character, the causus of the ancients, and retains its inflammatory nature until the exudation of plastic lymph occurs within the vein. Then sudden distension and swelling of the spleen sets in, because its blood cannot return back through the obstructed portal vein. Thus, in a few days, the spleen may reach the median line, and extend downwards, almost to the ilium. The enlargement of the spleen, even when not sufficient to appear beneath the ribs, may still be detected on careful percussion. Profuse hæmorrhages also are apt to occur from the bowels after the lapse of ten or twelve days, depending also, as will be readily seen, upon the obstruction of the

trunk of the vena portæ. The blood may pass off in large quantities from the intestines, and all the signs of collapse from the loss of blood ensue. "The superficial veins of the abdomen also become enlarged and serpentine, in the endeavour to establish a collateral circulation;" facts remarkably exemplified in the more chronic cases of Stokes and Reynaud, and to some extent, in the acute case related by Dr. Moses. Your committee will take this opportunity of stating that, in Dr. Watson's lectures on the Practice of Physic, two cases of venous obstruction, attended with the development of the supplementary circulation on the superficies of the chest and abdomen, are related, and diagrams given illustrative of the fact.

Having pointed out the phlebitic nature of the cases of fatal venous inflammation, reviewed by your committee, they proceed to exhibit the local phenomena, in each variety, which may lead to the location of the disease in the particular vessel in question. These are, according to Schönlein, pain in the middle point between the navel and ensiform cartilage, occurring spontaneously, occasionally becoming exceedingly severe, increased by pressure, and extending often along the tract of the veins of the spleen on the one side, which organ may be found tender, and along the tract of the vein towards the liver on the other side, which may also be found puffy and tender, and at times extending even backwards towards the spine. The pain, in the adhesive variety, is dull and aching, and in the suppurative, severe, burning, and gnawing. In Lambton's case no mention is made of this central pain, but there was constant pain in the right hypochondrium, with exacerbations, which the patient compared to smart cramps in the bowels. Jaundice is apt to occur at an early period; in Lambton's case, which was sub-acute in its course, in the course of a few weeks; in Schönlein's first case in the course of a few days, in his second case in a few hours, after a severe fit of anger and vexation—a mode of origin common to several cases of this kind, among others, that of Dr. Moses, in whom the jaundice displayed itself also immediately. In the case mentioned by Andral, in his clinique, the patient, after labouring for some time under symptoms of fever and gastro-enteritis, was attacked with pain and tension in the region of the liver, followed by jaundice. Reynaud's patient laboured for more than twelve months under jaundice, accompanied by wasting of the flesh and prostration of strength. He had constant pain in the epigastrium and swelling of the feet; symptoms which, as Stokes remarks, would have generally been regarded as those of chronic hepatitis: To these evidences of hepatic disorders may be added the frequent presence of bitter taste, a yellow coated tongue, loss of appetite, hiccup, nausea and vomiting, more or less vitiated bilious discharges from the bowels, and the presence of the colouring matter of the bile in the urine; pain, tenderness, and in some cases swelling in the region of the liver. In the patient seen by Dr. Moses, after the lapse of several months, the skin still retained an icterode hue, the excretions were dark green and bilious.

Obstruction of the vena portæ leads almost necessarily to abdominal dropsy. It existed in the cases seen by Moses and Reynaud, both of which were cases of the adhesive variety. In those of the suppurative variety, reported by Schönlein and Lambton, this did not

occur—a fact which is of importance in the distinctive diagnosis of these two forms of phlebitis. We may remark in passing, that in Reynaud's case, there existed emaciation coupled with canine appetite; and Graves, in cases supposed to be of this kind, not verified, however, by post-mortem examination, has observed the same thing, leading to the inference that the mesenteric and other abdominal veins take part in the process of absorption of the nutritive elements of the food from the intestines.

Such are the evidences which your committee have to exhibit, leading to the inference that these and all other similar cases of phlebitis, are in reality cases in which the veins of the liver are the seats of the particular lesion. In those cases (Reynaud's) in which anasarca has coexisted with the other symptoms, the cause has been found in the extension of the inflammation to the vena cava. Your committee feel bound to remark, that whereas, these prominent bilious symptoms attend upon the disease at its acme, some may be absent at its commencement; thus the tongue may be at first white, and only become yellow at a later period, and the bilious diarrhoea is usually preceded by constipation. The ages of the patients in four cases are mentioned:—Lambton's patient was 69 years of age. Dr. Moses' 32, Schönlein's 33 and 26, respectively. Of the five cases in which the sex is given, three were males and two females. The more important results, developed by the preceding report, your committee have endeavoured to embody in the following corollaries:—

1st. Phlebitis is of two kinds—acute, sub-acute, or adhesive,—acute and suppurative. In the first variety, generally, the symptoms, general and local, are of less intensity; in the second, they are much more severe, the fever is of a typhoid form, only, according to Schönlein, met with in this variety, of which it is therefore pathognomonic.

2nd. That, according to the same authority, the local symptoms are the same in both, but the febrile reaction and mode of death are different, and that in the adhesive form the early diagnosis is difficult, if not impossible, and at a later stage, only approximative.

3rd. That chills always and only occur in the suppurative variety, causing the remittent form of fever, which is the natural type of the disease, to resemble an irregular or an erratic intermittent, and are markedly indicative of the true nature of the case.

4th. That the six cases examined by your committee were instances of phlebitis, as shown by their accordance with the general symptoms of the disease, not less than by the *post-mortem* examinations, three being of the adhesive, and three of the suppurative variety.

5th. That in the suppurative variety, symptoms of hepatic, splenic, pneumonic, and cardiac diseases display themselves, which depend upon the deposit of pus by metastasis in the parenchymatous viscera: but this does not invariably happen, nor always depend upon the presence of transported pus when it does.

6th. That bilious phenomena may occur in general phlebitis from this cause, without an inflammation of the veins of the liver necessarily existing: or that they may depend solely upon the latter cause, in the absence of purulent deposits in the hepatic parenchyma.

7th. That certain symptoms, as pain in the middle point between the navel and ensiform cartilage in-

creased by pressure, extending along the tract of the splenic vein, and those of the liver, differing in each variety, or in the right hypochondrium only, jaundice, frequently a primary symptom, and resulting after fits of passion, a bitter taste in the mouth, a yellow coated tongue, vitiated bilious discharges, a bilious tinge of the urine, and dropsy, in the adhesive variety only, are the local signs which point to the existence of phlebitis in some hepatic vein, although, for reasons previously assigned, these are not in every case characteristic nor uniformly present in the commencement of every case.

8th. That it is only in cases where plastic lymph is effused into the vein, that the distension of the superficial abdominal veins occur; and that neither this, nor the enlargement of the spleen with which it is so often associated, are pathognomonic of portal phlebitis, but may depend upon obliteration of other large abdominal venous trunks.

9th. That the fever of phlebitis, in general, is in both varieties of the burning pungent kind; in the adhesive, retaining its inflammatory character until the exudation of plastic lymph occurs; in the suppurative, soon assuming the torpid typhoid character, to which variety also the chills and metastatic abscess are peculiar.

10th. That profuse and viscid sweats are among the distinctive evidences of suppurative phlebitis.

EDUCATIONAL MOVEMENT AT QUEEN'S COLLEGE, BIRMINGHAM.

The annual meeting of the Governors and friends of Queen's College was held in their library on Wednesday, the 26th instant, at which the Rev. Chancellor Law the Vice-Principal, presided; the following report was read by the Dean of the Faculty, William Sands Cox, Esq.:—

"The year which has elapsed since the last meeting of the Governors and friends of Queen's College has been greatly distinguished in its annals by increased prosperity, and by the adoption of measures which appear likely, under the continued blessing of Divine Providence, to realize greater educational advantages to the Community than even the most sanguine of its supporters have ventured to anticipate.

"The vast and increasing population of the Midland counties, in which we are located, has long pointed out the expediency of establishing, in the centre of the kingdom, and in this its metropolis, an institution which should secure to its inhabitants the advantages of a system of collegiate education and collegiate residence. The Council during the past year, have had the subject continually before them, and have at length nearly completed arrangements by which parents and guardians will have at their own doors, comparatively at a trifling expense, all the facilities and appliances of an improved University education in all its branches. Before, however, entering on these measures, the Council beg to present, in the first place, their Report on the senior and junior branches of the Medical Department.

"These departments have in every respect fully supported their character during the past year. Within

the period comprised between the 1st of October, 1848, and the present date, eighty students have been registered, of whom the following presented themselves at the Matriculation Examination, in July last, at the University of London, and passed:—

"In the First Class—Cantrell, Franks, Mitchell, Coleman, Lambert, Smith.

"In the Second Class—Chatwin, Earle, Vincent, Williams, Cockerill, Fox, Waller, Day, Turner, White.

"Your Council has the satisfaction to record that Franks, who has acquired the esteem of his tutors by his industry, perseverance, and good conduct, has obtained honours in classics and in chemistry. Lambert has also been placed in the class of honours in chemistry.

"In the Senior Department, Smith, Partridge, Buckley, Leacroft, Jones, Eyston, Thomason, Moore, and Mills, have presented themselves before the Royal College of Surgeons for examination, and have obtained their diplomas.

"At each quarterly Board your tutors have reported to the Council the progress and general conduct of the students; and your Council feels great pleasure in stating with regard to them, that nothing can be more gratifying than the account uniformly given of the diligence, good conduct, and regularity of the classes. The Chaplain's register shows that the daily attendance of the students, both senior and junior, at the theological lectures, is generally satisfactory.

"Your Council would now submit to your consideration and approval the Reports which have been presented to them from time to time respecting the other departments of that extended system of education, which has been so framed as to carry out her Majesty's gracious purpose in superadding to the original studies of Queen's College the various branches of literature, science, and art, and also the teaching of the doctrines and duties of Christianity, as the same are inculcated by the united Church of England and Ireland.

"I.—THE ARTS BRANCH OF THE JUNIOR DEPARTMENT.—The junior department having been found likely to succeed in all respects, and having been favoured with much public notice and approval, your Council has thrown open the benefits of this department to the sons and wards of gentlemen residing in Birmingham and its vicinity, and elsewhere, extending and adapting the system, formerly pursued with reference more immediately to medicine, to the purposes of general education, under the following regulations:—

"Students desiring general instruction to be admissible into the junior department of Queen's College after they have completed an elementary school education—say, about the age of sixteen.

"During the first year all students to attend the same classes in Latin, Greek, mathematics, French, German, and drawing.

"Students who are intended for the medical profession to receive during their second year's course of study separate instruction in the rudiments of chemistry, materia medica, pharmacy, and botany.

"At the commencement of the third year, such of the junior students as are duly qualified, enter the senior department of the College; those who are intended for the profession of medicine and surgery being received into the department of medicine; those who are intended for the law, or Church, or civil engineering, or

who desire for any purpose degrees in arts or law, being admitted into the department of arts.

"DEPARTMENT OF ARTS.—For the guidance of this department, your College have adopted, and beg of you to sanction, the following regulations:—

"That the curriculum of study do extend over three years.

"That the students of each year have distinct courses of lectures.

"That the subjects of study be Greek, Latin, mathematics, logic, the modern languages, history, civil engineering, natural, political, and moral philosophy, and more especially Christian ethics, and the doctrines of the Church of England.

"That each student do attend four lectures every day—namely, for one hour in the morning a lecture in Greek, for another hour a lecture in mathematics, and for one hour in the afternoon a lecture in Latin, another hour a lecture in history, logic, or one of the above-described branches of philosophy or civil engineering.

"That the subjects selected have particular reference to the requirements for the examination of the University of London for the degrees of B.A., M.A., B.C.L., and D.C.L.

[The Report then refers to the engineering and law departments, in which the formation of a College of civil engineers and architects is recommended.]

"THEOLOGICAL DEPARTMENT.—That great benefactor to your College, the Rev. Dr. Warneford, having entertained the pious intention of making the Arts department available for the purpose of training sober-minded young men with scanty pecuniary means for Holy Orders, and having presented the munificent donation of £3000 for the endowment of a Professorship of Pastoral Theology, to the intent that students who intend to be candidates for Holy Orders in our Church may be taught the ministerial duties in their various branches, as also the composition and delivery of sermons, the reading of the Church Services, the history of the Liturgies, the reason and use of the Rubrics, and all other matters connected with, and subservient to, a faithful and efficient performance of what the Church requires of her pastors and ministers for the edification of their flocks.

"A similar department at King's College, London, having met with the cordial approbation of the two Archbishops and the whole episcopal body, and such Archbishops and Bishops having consented to admit as candidates for Holy Orders those students in theology who should produce the Warden's certificate, your Council have given the subject their most serious consideration and attention, and have felt it their duty at once to obey Dr. Warneford's wishes by the appointment of a professor. Well aware that time must be required to mature their theological plans, and to bring such a scheme into full operation, but knowing at the same time that such a Theological Professor might be made of great use to the general purposes of the College, by having entrusted to him the teaching of all the classes of the College, senior and junior, medical, classical, engineering, and legal, in Church history, the doctrines of our Church, the discipline of our Church, and its admirable parochial system. It is further our intention to avail ourselves of the earliest opportunity of placing under the spiritual guidance of the Professor

of Pastoral Divinity the patients in the Queen's Hospital, that hospital having already the benefit of an endowment of £40 a year from Dr. Warneford for the salary of its Chaplain.

"Although granting thus far without reserve that we are quite unprepared at present to commence a regular system of professional teaching for students in divinity, we have ventured to make an immediate appointment of a Professor, and propose to avail ourselves of his services in the manner above described.

"Having now completed our Report of the six departments of the College, to which it may be further added, that Mr. Sands Cox has also founded the Queen's Hospital, which is in close connection with the medical department of the College, and is under the same general management, it must, we think, have become apparent to every one, that whilst at the head of each department there are well qualified tutors and professors, it is desirable, if not imperatively necessary, that there should be constantly on the spot a resident head presiding over the whole. It will, we doubt not, be further conceded that such head or warden, having the general superintendence of so extended a system of collegiate discipline, and coming into daily intercourse with so many tutors in holy orders, should himself be a clergyman of University education, of considerable standing, and well acquainted with the general principles and details of education under its various aspects. Your Council hope that they may be permitted to congratulate their friends and supporters on having obtained the services of the Rev. Horace Gray, a gentleman eminently qualified for the office—of one who, having obtained honours at the University of Oxford, next presided over the education of a young nobleman of very high rank, then undertook parochial duty in a most populous neighbourhood, then was called to direct, as head, the Diocesan Training College at Wells, and to visit all the Parochial Schools throughout the diocese; and lastly, who has been living as a parish priest, and been connected with the Cathedral of Wells as one of its Prebendaries. It is to be regretted that the very limited state of our finances prevents our offering to an individual so well trained for his office, and of such varied qualifications, any adequate remuneration; but it is allowable to indulge the hope that better times may come; and in the meanwhile we would congratulate ourselves on our promise of an enlarged sphere of usefulness, and on the completeness of the arrangements which, in so comparatively brief an interval—since the opening of our College—we have been enabled by God's blessing to effect.

"For the reception of students in the medical, engineering and legal departments, the east and west wings of the College in Paradise Street—which will comprise 70 chambers for students, dining-hall, lecture-rooms, library, engineering-workshops, and model-rooms—are partly in use, and partly in a state of advance towards completion.

"Nos. 7 and 8 Crescent, will at present afford accommodation for the Warden, together with ten sets of rooms, which are completed for the reception of such students as our enlarged theological arrangements may render necessary.

"In the occurrences of the past year your Council should mention that they have unanimously elected as their First Fellow, under the provisions of the

Charter, Mr. George Bellasis Masfen, surgeon, of Stafford, who obtained the Warneford Prize for the year 1847.

"Your Council have to acknowledge a valuable collection of minerals, presented by your deeply lamented and accomplished townsman, Sir E. Thomason, Knt.

"Further, your Council have to acknowledge a handsome donation of law books, presented by John Suckling, Esq.,

"Also they would mention that important additions have been made to your anatomical museum by the purchase of the late Dr. Thibert's pathological museum.

"To the list of Honorary Governors, it has been permitted to your Council to add the names of the Right Hon. Lord Redesdale and the Hon. Wm. Leigh.

"Your Council have again the gratification to repeat in the most respectful terms, their acknowledgments to the Right Hon. Lord Lyttelton, the Principal, for his valuable advice and able assistance at your Council Board. To the Vice-Principal, Mr. Chancellor Law, your Council has been especially indebted in the past year for the continued devotion of his valuable time and thoughts to the great end of extending and perfecting the practical working of the College in accordance with those sacred religious principles upon which it is founded. To your Vice-Principal the College is indebted for several donations of books, more particularly a set of the Delphin Classics, in 150 volumes; also for a highly-valued portrait of Dr. Birt Davies, whose services, in the language of the donor, have been thus recorded:—"Dr. Birt Davies has done very much for the College. He has given his valuable time to all our Committees, and at all our Council Boards he has ever been ready with the benefit of his enlarged experience and distinguished talents. He has gone along with us from the first to the last, heart and hand. The Council owes to Dr. Birt Davies, for his aid in every other respect, a great weight of obligation."

"It is impossible for your Council adequately to acknowledge the continued invaluable services of your distinguished founder, Mr. Sands Cox. That gentleman has laboured throughout the year, and more than once to the serious detriment of his health, in carrying out all the great principles, and all the minute details of the College, in all its branches, and we can only hope that his life will long be spared to witness the success of his unwearied efforts, in the midst of a circle of grateful and attached friends.

"Such are the important measures which have been under the consideration of your Council during the past year.

"Are they too sanguine if they indulge the hope that the friends and patrons of education will aid this extended system, and promote the objects of your Council by the foundation of professorships and scholarships; by benefactions, and by donations of models of machinery and architecture, and specimens of the higher branches of manufactures, and the fine arts; by philosophical apparatus, and books and specimens of natural history, geology, and mineralogy? The members of the medical profession are appealed to; in particular, for donations of pathological specimens, with which view your Council have given directions to your Curator to prepare tablets and catalogues on which to record donations and benefactions, with the names and residences of the donors, to be published in the annual Report.

"In conclusion, your Council hope that the same bright beam of promise, which a gracious Providence has permitted to gild the dawn of your Institution may, under the same heavenly guidance, continue to illumine every part of its more extended horizon, and every period of its more matured and meridian career."

NATIONAL INSTITUTE OF MEDICINE, SURGERY, AND MIDWIFERY.

The following circular letter has been extensively circulated among the influential members of the profession, by the Council of the National Institute of Medicine, Surgery, and Midwifery:—

Hanover Square Rooms, Hanover Square,
September 5th, 1849.

Sir,—I am requested by the Council of the National Institute of Medicine, Surgery, and Midwifery, to forward to you the following Copy of a Resolution passed unanimously at the General Meeting of the Institute, held at the Hanover Square Rooms, on the 8th day of August, 1849.

Resolved—"That this Meeting cannot too strongly urge upon their Medical brethren the necessity of united action; and they recommend that the Council of the Institute do forthwith convene a General Conference of Delegates from the various Associations that have been established for the purpose of effecting a reform of the laws governing the Medical Institutions of the kingdom, for the special purpose of securing as extensive an union of sentiment and action as possible upon the main principles of Medical Legislation."

I am requested also to state to you, that during the last two Sessions of Parliament, the Institute has acted in concert with the Corporate Institutions of this country, for the purpose of obtaining an Act of Parliament reforming the Laws by which at present the Profession is governed; in the earnest hope, and with the just expectation, that a conciliatory course of conduct would ensure the same success. From causes, not originating with itself, which have been explained to the Profession, the efforts of the Institute, acting by its representatives in the Conference recently held at the Royal College of Physicians, have for the present been defeated, by the defection of one of the parties from the principles to which the Conference had unanimously agreed.

Upwards of twenty years' agitation in the cause of Medical Reform, by numerous Associations successively, and of late years by the National Association and the National Institute, under different governments and the most variable circumstances, has tended only to confirm the truth, which developed itself at a very early period, that this great political, social, and professional object, is only to be achieved by opposing the combined efforts of the great body of the Profession against the narrow and exclusive policy of a small, but, from the defects of the laws, and circumstances of misrule and bad government, an influential and powerful minority.

The Council of the Institute, with ample opportunities of forming an opinion, are convinced that the continuous exertions of the Profession, during this long period, although hitherto failing to secure a consummation of the desired object, have told in favour of Medical Reform with a cumulative effect; and that at the present moment, a combined effort on the part of all classes of

Medical Reformers would lead to a speedy settlement of this great question.

I am accordingly instructed to intimate to you, that it is the intention of the Institute, forthwith, to renew its exertions, with increased vigour, for the purpose of obtaining a legislative enactment and a redress of grievances during the next Session of Parliament; and that it is the earnest desire of the Institute, and the object of the above resolution, to devise such a plan of operations as shall meet with that general co-operation amongst Medical Reformers which is so absolutely necessary.

In accordance with the resolution, and in furtherance of these views, the Council of the National Institute request me to inquire, whether it will be convenient to you to assist at the Conference intended to be convened in London, of all bodies who have evinced an interest in the settlement of medical affairs.

It is contemplated that the proposed Conference should take into consideration a comprehensive view of all questions upon which a difference of opinion has subsisted between the various sections of the Medical Profession, and in particular,—

1. The practicability of obtaining a redress of the monster grievance inflicted by the Council of the Royal College of Surgeons; and of opening the College to its members, so as to avoid the necessity of a New Incorporation; and the most expedient course to be adopted in reference to the position in which the Council of the College at present stands, in relation to the "Principles" of a Medical Reform Bill recently laid before the Profession.

2. The Apothecaries' Society.

3. The proposed New Incorporation.

4. The propriety of convening a General Meeting of the Profession at large, and the course to be adopted at such Meeting.

The Council will feel obliged by an early reply to this application, and if you should signify your intention to attend the Conference, due notice will be forwarded of the day and hour of meeting.

I have the honour to be, Sir,

Your most obedient servant,

GEORGE ROSS, Secretary.

MICROSCOPICAL DISCOVERIES IN CHOLERA.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND
SURGICAL JOURNAL.

SIR,—In this week's number of the *Medical Gazette* there is an announcement of the discovery by Mr. Brittan, of Bristol, "of certain peculiar bodies, hitherto undescribed, as a characteristic constituent of cholera evacuations, &c."

In confirmation of the discovery made by Mr. Brittan (a discovery on which I cordially congratulate him, while it gratifies me exceedingly, as it appears to promise a demonstration of the views published by me in my 'Disquisition on the Fungous origin of Cholera') I may be permitted to say, that, in concert with my friend Mr. Curme, of this town, some microscopic investigations have been made into the nature and appearances of the exudations of cholera patients; and that although our opportunities have hitherto been very limited, they have yielded *positive* results sufficient to encourage a more extended series of examinations.

To avoid the appearance of plagiarism, I think it well, before seeing the publication of Mr. Brittan's observations, to state that, in the clammy sweat accompanying the last stage of collapse in cholera, we have observed minute organized bodies closely resembling other bodies admitted by naturalists and microscopists to have a *Protophytic* organization.

I should not have published this immature account of our incomplete investigation, but with the two-fold object of corroborating (it may be) Mr. Brittan's statements, and of vindicating myself from the possible imputation of piracy in anything I may hereafter publish on the subject.

I am, Mr. Editor, yours very obediently,

CHARLES COWDELL,

Physician to the Dorset County Hospital.
Dorchester, September 22, 1849.

LIME WATER IN CHOLERA.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,—Of all the remedies which I have heard of, or seen tried, in cholera, I think none are so likely to be generally useful as lime-water, either with, or without, calomel, administered in small doses—such as one grain of calomel and half an ounce of lime-water every quarter of an hour, or less frequently according to the urgency of the symptoms.

By immediately publishing the above, you will oblige

Your obedient servant,

ISAAC WATMOUGH, M.D.

P.S.—Dry cupping over the stomach and sinapisms to the abdomen, should also be employed.—I. W.

Pocklington, Yorkshire,
Sept. 15, 1849.

Medical Intelligence.

APPOINTMENTS.

Mr. J. C. Wordsworth has been appointed Assistant-Surgeon to the London Hospital, occasioned by the election of Mr. Curling to the office of Surgeon, in the room of the late Mr. Andrews.

Mr. Tracy, of St. Bartholomew's Hospital, has been appointed to the office of Dentist to Christ's Hospital, vacant by the death of Mr. Fox.

Dr. Lewis, of Edward Street, Portman Square, has been appointed by the General Board of Health, the Medical Superintendent of St. George's, Hanover Square, Westminster, Chelsea, and Kensington.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Members Thursday, Sept. 13th, 1849:—John Merriman Fewkes, Barrow-upon-Stour, Leicester; William Robinson, Gateshead, Durham; Robert Wailes, Leeds; Thomas Wade, Hull.

Gentlemen admitted Members Thursday, Sept. 20th, 1849:—Thomas Costerton, Great Yarmouth, Norfolk; Samuel Montgomery Charles Alfred Anderson Smith; Robert Clarke, Tamworth.

OBITUARY.

September 8th, at Wisbeach, John Rose Weatherhead, Esq., surgeon.

September 8th, at his residence, Wellington House, Stoke's Croft, Bristol, aged 26, of cholera, Joseph Williams, jun., surgeon.

September 9th, of Asiatic cholera, after thirty-three hours' illness, Mr. Richard Simon Edsall, surgeon, of Bermondsey, aged thirty-six.

September 9th, at Delapré House, Bridport, Robert Graves, M.D.

September 10th, after a protracted illness, aged 58, Professor William Warene, Lecturer on Anatomy, Physiology, the Fine Arts, &c., late of Glasgow.

September 10th, at the house of his brother, in Bedford Street, South, Liverpool, aged 33, Emil Lemonius, M.D., of Berlin.

September 13th, at Kennitty, King's County, deeply and deservedly lamented, in the prime of life, of brain fever, after a few days illness, James Willington Walsh, Esq., M.D., Fellow and Licentiate of the Royal College of Surgeons in Ireland, Medical Superintendent of the Kennitty Dispensary and Temporary Fever Hospital.

September 14th, aged 77, Robert Higgins, Esq., surgeon, Newport, Salop, in which town he practised for upwards of half a century.

September 17, at his residence, Cheshunt, Herts, Edward Harrold, Esq., M.R.C.S., in the 81st year of his age.

Lately, at sea, Harry Goldney, Esq., surgeon, R.N.

Lately, at Offenbach-on-the-Main, Dr. Carl Ferdinand Becker.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

NOTICE TO MEMBERS.

The Secretary presents his compliments to those members of the Provincial Medical and Surgical Association whose Subscriptions remain in Arrear, and begs respectfully to call their attention to the following Law, which was passed unanimously at the Anniversary Meeting, held at Bath, in 1848:—

"If any Member's Subscription remain unpaid twelve months after it shall have become due, the Medical Journal and other publications of the Society shall be withheld from such Member till his arrears be paid."

He earnestly entreats all those gentlemen whose Subscriptions are now in arrear, that they will cause them to be paid, either to himself, or to the Treasurer, Dr. Hastings, without further delay.

JAMES P. SHEPPARD,

Secretary to the Association.

Worcester, August 6th, 1849.

TO CORRESPONDENTS.

Communications have been received from Mr. King, Mr. Brown, the Birmingham Pathological Society, a Member of the Association and Surg. R.N., Mr. Radcliffe, Mr. Gilbert, and Dr. Barclay.

It is requested that all letters and communications be sent to J. H. Walsh, Esq., Foregate Street, Worcester. Parcels and books for review may be addressed to the care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON SURGERY,

DELIVERED IN THE
MEDICAL SCHOOL OF CAMBRIDGE.

By GEORGE MURRAY HUMPHRY, Esq.,

Downing College, Surgeon to Addenbrooke's Hospital

LECTURE XIV. SCROFULA.

General view of the pathology of scrofula; it is an inflammatory affection, but not a specific inflammation; the scrofulous constitution is marked by the defective energy of nutrition witnessed in primary and secondary assimilative processes, in development, and in growth; periods of life and persons most subject to scrofula; how far hereditary; scrofulous persons comparatively exempt from certain diseases; characters of scrofulous inflammation corresponding to those of constitution; scrofulous lymph, abscesses, and ulcers.—Treatment:—Attend first to the indigestion, secondly to the general health, thirdly to the local disease.

In treating of inflammation I have frequently directed your attention to the various modifications in its symptoms, progress; and results, which are impressed upon it by the age and constitution of the individual; and I come now to speak especially of a kind of inflammation, the strumous or scrofulous, which occurs in persons of a particular temperament. In its characters and effects it differs from ordinary inflammation sufficiently to have acquired a distinct name, and to deserve a separate description; but I wish you to understand before we proceed with the investigation of this disease, that its peculiarities, in other words the points in which it differs from other inflammatory affections, correspond with, and are attributable to, certain peculiarities of constitution in those who are the subjects of it.

That you may entertain clear notions respecting this fundamental axiom in the pathology of scrofula, I will first point out the more remarkable features in the constitution of scrofulous patients, and will then describe the usual course of the scrofulous inflammation, showing how the one corresponds with the other; and I think you will find no difficulty in acquiescing in the opinion that the disease is essentially of a constitutional nature, having no claim to the name specific which is so often applied to it in a loose and careless manner, as

though all inflammations and diseases differing from the ordinary type were to be called specific.

The word specific in pathology is generally used to designate a disease, the peculiarities of which are independent of the constitution, being related to some extraneous influence, such as an unusual exciting cause, some particular poison perhaps, which impresses upon the morbid process excited by it a certain course differing from the ordinary routine. The inflammation of syphilis, for instance, differs in the mode of its appearance, and in the results it produces from other inflammations; it presents the same characters, or nearly so, in every variety of temperament; is a disease independent or superadded, as it were, to the constitution, and seems to depend upon the presence of some subtle poison from which its peculiar features are derived. It is, therefore, rightly named a specific inflammation. The same is true of several other inflammatory affections, which, like syphilis, are occasioned by a poison, affect all persons nearly in the same manner, and have very little regard for constitutional idiosyncrasies. Such are measles, small-pox, scarlatina, &c. In this sense of the term, a disease like scrofula, deriving as it does all its more important distinctive features from the peculiar temperament of the sufferer, cannot be regarded as a specific affection.

But to be sure that these statements respecting scrofula are true, let us first consider the kind of persons in whom inflammation presents these peculiar characters, that is to say, let us recount the marks of the scrofulous diathesis. Now, these persons differ from one another in a great many respects, some are tall, others short; some are stout, others thin; some are dark, others are of light complexion, but all are alike remarkable for the fineness and delicacy of their physical conformation; and this is shown in a variety of ways. Their beautiful soft, clear, delicate, waxy skin, with a fine rosy tint, and veins conspicuous, "like streamlets in a field of snow," often attract attention, and convey even to the careless observer an idea of great liability to disease. The skin is easily cracked, freckled, or sun-burnt; the hair is fine, more commonly light than dark, and the eyelashes are long, fine, and beautifully curved. These persons are generally soon fatigued, and require a long period of rest to recruit their energies; they sleep long and languidly, perhaps perspiring during sleep, and wake tired. The circulation is feeble, readily excited, and as readily depressed. They are unable to bear cold

or damp, and flush up after a meal, on slight exertion, or in a warm room.

The nervous system is sometimes of great proportionate size, but partakes most probably of the general sluggishness and inactivity of the system. A large number of scrofulous persons are mentally, no less than physically, dull and inert; they seem unable to rouse their minds to exertion, and are inclined to doze through life. In some, on the contrary, there is a remarkable vivacity and precociousness of intellect in early life, combined with agility and liveliness of manner. Such children are said to have spirits beyond their strength, and to wear themselves out. They are often apt scholars, and delight their parents with the early indications of future greatness, but unhappily the expectations founded upon this precocity are mostly disappointed. The delicate frame gives way to premature decay, or the quickness of perception so conspicuous in the child does not keep pace with his growth. As a youth he is scarcely superior to his compeers, and as a man he is seldom found to possess that close vigorous power of mental application which is the surest evidence of intellectual strength. The mind of the scrofulous person is seldom well balanced; he may excel in memory or in imagination, but he is defective in judgment. He may be brilliant at times, but he is fitful, uncertain, not to be relied on.

Associated with this delicacy of structure and want of physical strength, and constituting, indeed, the essential feature of the constitution, is a congenital want of energy of the nutritive functions. It is not that the powers of the system are depressed by disease of one or more of the great organs, or that there is a natural want of balance between them. A person may be greatly reduced by disease of stomach, heart, or brain, or he may suffer under congenital weakness of one or other of those viscera, without being scrofulous. In the class of patients of whom we are now speaking, the imperfection of the nutritive functions is not confined to one or a few parts, but is common to the whole body. The *manifestation* of the scrofulous disease may be observed in certain regions only which may be more exposed to exciting causes, or it may occur in some parts which are, from defect in development, weaker than others; or in the absence of an exciting cause, it may never make its appearance in any part of the body at all. Nevertheless the whole body is predisposed, in greater or less degree, to inflammatory attacks of a languid troublesome kind which are evidently connected with a feeble state of the nutritive functions, and which we call scrofulous.

This want of energy is not confined to the secondary processes of nutrition, or those by which the components of the blood are converted into the tissues, but it extends in like manner to the primary or digestive department. The digestive, the chylipoietic, and the blood-making functions, are all more or less imperfectly performed, and the organs subservient to these functions exhibit symptoms of their debility in various ways. These symptoms are more frequently referred to the stomach than to other parts, because the signs of disorder

in that organ are most easily appreciated, and the term indigestion is hence almost synonymous with that of imperfection in the stomach department of the primary processes of nutrition. The appetite of the scrofulous person may be, and often is, voracious; and you will frequently hear the remark, that the pale, delicate, scrofulous child, eats more than any person in the family, but the food is not well digested; the child is troubled with flatulence, restlessness, and uneasiness after meals, is liable to sick headaches, the urine is high coloured, the evacuations from the bowels unnatural, containing perhaps undigested portions of food.

You are not to suppose, from the predominance of these particular symptoms of indigestion, that the disorder is confined to the stomach and bowels, for it affects, as I have just said, the whole range of the chyle and blood-making processes. The elements of the blood are with difficulty and imperfectly elaborated; the fibrin is produced in small quantities, and is deficient in contractile force; the coagulum is large, loose, and ill-formed; the albumen exists in preternaturally large quantities, for want of the completion of those changes by which it should be converted into fibrin; and this superabundance of the albumen and deficiency of fibrin has been thought to constitute the exciting cause of the whole complaint. With equally limited apprehension of the pathology of the complaint, some pathologists, observing only the stomach symptoms of indigestion, have imagined scrofula to be identical with, or at any rate, entirely dependent on, dyspepsia, forgetting that the dyspepsia, and the ulcer or the other manifestations of the disease, whatever they be, are the result of the same inherent want of tone which pervades the whole body, affecting the nutritive or secondary assimilative processes, as well as the chylipoietic and sanguineous systems.

This same want of vigour which we find in the primary and secondary processes of assimilation, extends also to the development and growth of the child. The scrofulous infant, or the offspring of delicate scrofulous parents, is sometimes monstrous, imperfectly developed as to limbs, palate, or teeth; or it may be that the proper shape of the body is completed, and its proper size attained, but the tissues do not acquire their normal structure at the average period. The bones remain soft, so as to bend under the increasing weight of the body, giving rise to the affection called rickets; at the same time, perhaps, the muscles are observed to be flaccid and inert.

Cases in which the structural development of the soft parts does not keep pace with the growth of the body, are by no means rare. The children in whom there is this defect may appear to be plump and well nourished, grow and are stout enough, but they are dull, flabby, and inert, loll about, and show no animation, no playfulness, or disposition to move, make no attempts to stand or walk, and sleep a great deal; they have no strength in the back, which becomes curved laterally, or from before backwards, and they lie like a dead weight, and make no effort to support themselves in the nurse's arm. The defect is not

confined to the muscular system, for they have little nervous energy, the circulation and digestion are weak, and the skin pale and flaccid. A soft or rickety state of the bones is probably, for the most part, associated with this condition, although the curvatures in the lower extremities may depend upon other causes than the inactivity of the muscles, and the inability of the child to bear upon its legs.

The want of proper energy of development and nutrition in scrofulous children, is observed to be associated more commonly with an absence of proper structural formation, than with deficiency of size. The two are, however, not unfrequently conjoined: scrofulous persons are sometimes dwarfish, or the due proportion of growth between the members is not maintained, so that the infantile type is continued in the child, and that of the child is perpetuated in the man. The cranium remains disproportionately large as compared with the face; and the extremities, particularly the lower ones, do not grow into due relation with the trunk. The small neck, and little legs, are ill able to bear the large head, and the bulky trunk, and probably give way under them. In the later periods of growth the disproportion is observed in an opposite manner, for that development of the trunk, particularly of the chest, which should take place at and after the period of puberty, fails to be accomplished. This is very frequently noticed in young persons whose growth has been rapid in the extremities. It seems as if the powers of nutrition had been expended so much upon the limbs, that no force is left to effect the last work of growth, viz., that of the trunk, and the narrow chest remains for a long time a conspicuous feature in the person of the overgrown youth. The development and growth of the genital system attendant upon puberty takes place slowly, and is delayed beyond its proper period. This is particularly observed in the girl; it is long before the catamenia are firmly established, and the whole system sympathises in the want of energy displayed in the effort at development which should now take place. The girl is languid, unfit for exertion, and liable to a variety of ailments.

You see, therefore, how general is that delicacy and want of force in which I have told you the essence of the scrofulous diathesis consists. It is apparent throughout the structure of the frame, in the soft as well as in the hard parts, in the internal organs no less than in the skin and muscles; and the mental character partakes, for the most part, of the imperfection manifest in the physical formation. It is apparent also in every department of nutrition, in the primary and secondary processes of assimilation, in development of shape and structure, in growth, and in the changes incidental to puberty. One and all of these functions evince a singular want of energy, and an unusual liability to interruption and disorder in scrofulous persons.

Scrofula, or scrofulous inflammation, is most frequent in the early periods of life, when the tissues are soft and fine, the frame delicate, unable to bear exposures, and the nutritive processes, though busy, are easily disturbed. It becomes less frequent as the body gra-

dually attains its full strength, solidity, and power of resisting the exciting causes of disease; and it is comparatively rare in old age, when the tissues have become coarse, dry, and tough.

All the various causes which tend to enervate and reduce the physical and nutritive energies are fertile sources of scrofula. In the upper classes of society, late hours, insufficient exercise in the open air, imperfect ventilation of rooms, and the introduction of heated air into houses by means of stoves, flues, &c. These, and many other causes, combine to weaken the parents, and engender delicate sickly offspring. In the lower classes the crowded dwellings, and unwholesome air in towns, together with insufficient food, exposure to cold, &c., induce the same result. I have often been surprised at the prevalence of scrofula in country places, where the parents and children engaged in agricultural employments, enjoy the pure fresh air from morning to night. I can only account for this by the indifferent food upon which the rustics frequently live, and the small proportion which the animal bears to the vegetable ingredient in their diet, for they feed chiefly upon bread, and approach to the graminivorous animals in the sluggishness of their movements, and the inactivity of their nutritive energies. It may be that the practice of intermarrying, so common in country villages, has some influence, but I do not believe this to be so fertile a source of disease as is generally supposed. The natives of warm regions, who come into cold climates, and animals subjected to the same change, are very liable to suffer from this disease. Monkeys commonly die of tubercle, and you may see in the museum numerous specimens of scrofulous disease of the bones taken from these creatures.

The scrofulous inflammation often breaks out when the bodily powers have been lowered by some other disease; thus the various epidemics among children, such as measles, small-pox, scarlatina, whooping-cough, &c., are always followed by scrofula in a considerable number of cases. The same result may be occasioned in the children by debilitating causes, such as syphilis, or other disease, operating upon the parents, especially upon the mother, during pregnancy. You may often trace the cause of the occurrence of scrofula in one member of an otherwise healthy family to the indisposition of the mother, during the period of her pregnancy with the sickly infant. The children of elderly persons, the offspring of very early marriages, children born before the full term, and twins, are all liable to present the scrofulous constitution, and to suffer the disease.

Of the hereditary nature of scrofula much has been written,—more, perhaps, than the question deserves, for it loses some of its interest when we come to regard the disease as merely an inflammatory affection, with certain peculiarities impressed upon it by the particular constitution of the individual. We thus refer the disease back to the constitution, and have only to consider whether the latter be hereditary. That it should be so is no less probable than that likeness of feature and stature, of temper and disposition, should be transmitted

from parents to their children. Accordingly we may generally discover the signs, if not of scrofula, at any rate, of the scrofulous constitution, among the various members of the same family. Not that this is necessarily the case, because, as I have already told you, both the constitution, and the disease, may be engendered by various debilitating causes, operating upon the parents or the children. Persons are generally much affronted, as well as alarmed, at the idea of there being any taint of scrofula in the family, and you must be very careful how you express such an opinion; indeed, it is wise not to use the word at all in your intercourse with the patients, unless you take the trouble to explain to them that there is no loathsome stream of disease running in their blood, but merely a delicacy of constitution, and an inactivity of the nutritive functions, which occasions a liability to inflammatory attacks, and at the same time renders those attacks sluggish, tedious, and difficult of cure.

It will be some consolation to the inheritors of this constitution to know that they are often long lived, that the disposition to scrofulous inflammation decreases with advancing years, and that they enjoy a comparative immunity from acute inflammatory attacks, and from malignant diseases, during the early periods of life. Though they suffer from chronic lingering sores and abscesses, and a variety of minor ailments, they are not often hurried away by violent bursts of disease. I have said they are comparatively free from malignant disease in early life, which statement may be at variance with some opinions you have met with upon this point, and I only give the result of my own observation, when I tell you that malignant disease does not often affect the light haired, fine skinned, waxy, scrofulous patient, under the age of thirty; in short, that the disposition to malignant disease is slight in proportion as that to scrofula is strong.

The feature of the scrofulous constitution with which we are at present most concerned, is the liability to inflammatory attacks, and to the persistence of inflammation in a chronic form, when it has once commenced. It is excited by the slightest causes. The delicate scrofulous child suffers, perhaps, all the winter long with catarrhal inflammation of the schneiderian or bronchial membrane, with sore eyes, or with diarrhoea; a slight sprain gives rise to long standing inflammation of a joint, or a tap on the leg to necrosis of the tibia. Some children seem as if they could not thrive without a local complaint, for as soon as one is cured another makes its appearance; if that be not so, they are heavy and drowsy, or restless and fretful, as if labouring under a latent malady, or suppressed virus: perhaps they are better when the warm weather returns, or becoming stronger in course of time, they are said to outgrow the disease.

But I must explain to you more at length in what manner the scrofulous inflammation, and the effects produced by it, correspond with the characters of the constitution which I have been describing. I have already, on several occasions, directed your attention to the close relation that exists between the phenomena

of inflammation in each individual, and the mode in which the nutritive processes are conducted under ordinary circumstances. We have found the inflammation of the robust man to be vigorous in its character, active in its progress, and speedy in its termination; its products well formed, its pus thick and loaded with corpuscles, destruction of tissues is quick to follow, and reparation, when established, advances with equal rapidity. We have found, on the other hand, that in the aged and the enfeebled, the disease is less strongly marked; is more lingering in its stages; its products are less perfectly developed; the pus produced by it is thin, containing few and ill-formed corpuscles; the tissues soon ulcerate and mortify, not so much on account of the severity of the disease, as by reason of their own feeble powers of resistance, and the work of reparation is less efficiently conducted than in the former case. In the scrofulous constitution, the very essence of which consists in delicacy of structure, associated with a great want of vigour in the nutritive processes throughout the system, the characters of the inflammation bear as close a relation to the state of the nutritive functions, as they do in the two classes of patients just mentioned. The morbid process in these persons is particularly languid and sluggish, its products are very ill-formed, the tissues are disposed to ulcerate, and the ulcers continue for months unhealed. The cicatrices are thin, delicate, and give way upon slight occasions.

In this correspondence of the inflammation, with the atony of the constitution, lies the key to the pathology of scrofula, and here is to be sought the explanation of those peculiarities which mark the several stages of the disease, and which have acquired for it, in the estimation of many writers, a place in the catalogue of specific affections.

The *symptoms* of scrofulous inflammation are those of a languid sluggish disease. The colour of the part affected is dull blue or leaden, the heat not much above the natural temperature; there is no great excitement of the vascular system, and the pain is not severe. You will be sometimes surprised how little complaint is made by persons who are suffering under large abscesses and extensive ulcers. The general disturbance of the system occasioned by the local inflammation is not severe, and has rather the character of restlessness and irritability than well-marked fever. Now and then, it must be admitted, when the exciting cause is severe, the inflammation is more acute, and is attended with a good deal of swelling from effusion of serum, but even then it has great disposition to subside into the dull chronic affection I am describing.

The characters of the effused *lymph* form one of the most striking and important features of the disease. It is remarkably deficient in contractile power and force of organization. These properties, which are at a low ebb in the fibrin of the blood of these persons, appear to be rather diminished than increased by the inflammatory process; so that the altered fibrin or lymph seems scarcely able to hold together, and consists in great measure of amorphous granules. It often fails to

be supplied with vessels or to form any vascular connection with the surrounding parts, and degenerates into a soft greyish pulpy substance, which acts rather as an irritant to the adjacent tissues, and maintains the inflammation in them. The qualities of this lymph are so peculiar, that it has, by some authors, been described as the characteristic feature of scrofula, and you may often distinguish the scrofulous affection from other disease by the presence, in spots or masses, of this soft, grey, sodden lymph, looking like sloughs at the bottom or in the circumference of an ulcer or an abscess. It is often found in enlarged glands, and has been called, *par excellence*, scrofulous matter, but you are not by this term to suppose that it is anything more than what I have described, viz., soft degenerate lymph, altered and weakened as to its force and vitality by the inflammatory process.

The scrofulous *abscess*, resulting in part from the imperfect solution of this ill-conditioned lymph, and in part from suppuration as under ordinary circumstances, is of slow formation and sluggish in its progress, coming tardily to the surface, and remaining open for a great length of time. It is often attended with very little pain or other symptom till it approaches so near the surface that the integuments over it begin to inflame. Very commonly these abscesses are discovered by accident when they have attained to considerable size, and from the small amount of inflammation, of heat, or of pain, that accompany them, they have been called cold abscesses. The pus is thin and contains a scanty number of irregularly-shaped ill-formed corpuscles, together with a larger quantity of granules and fragments of globules, and some oil. Often it is rendered thick and curdy by the presence of little masses or flakes of partially-dissolved lymph sodden in it. Indeed the pus seems for the most part to consist of a substance intermediate between the peculiar scrofulous lymph, which I just described to you, and serum, and it is probably formed in great measure by an imperfect mixture of the two.

The large amount of serum and the small proportion of globules contained in the pus of these abscesses are related to the languor of the attendant inflammation, and are favourable to their dispersion by absorption. You may remember that, when speaking of abscesses, I told you that the facility with which absorption occurs is proportionate to the deficiency of globules in the pus, and that it scarcely ever takes place when they are numerous and the result of acute inflammation. I then said that this mode of termination is more likely to take place in scrofulous than in other kind of abscesses, because in them the pus globules exist in such small number, and do not possess the same irritating qualities that belong to them when they are the product of acute disease. Not unfrequently after the serum has been removed by absorption, the few pus globules are reduced to fragments, and together with the granules and remaining masses of lymph form a soft, cheesy, or putty-like substance, which becomes infiltrated with earthy matter, and remains in a quiet state during the rest of life. In the examination of persons who have died from other

disease, you may not unfrequently find calcareous lumps which have been thus produced in the bronchial and mesenteric glands, and in other parts. Now and then they make their way into the intestinal canal or the air tubes, and are coughed up or pass with the motions. This calcareous degeneration, though most common in the lymph and pus of scrofulous persons, is not peculiar to them, as I have before told you, it may be observed in robust and otherwise healthy subjects.

The scrofulous *ulcers* correspond with the other forms of the disease. They are generally superficial and often exist in considerable numbers affecting a wide surface of the skin. They disclose grey sloughy-looking beds of lymph at first, and when these are cleared away the granulations upon their surfaces are pale, languid, and flabby. The skin around them is often undermined and blueish, the discharge copious and thin. Cicatrization is generally very slow; sometimes, however it is exceedingly rapid, and large sores are skinned over in quick time. The cicatrices are thin and fine, with delicate aborescent vessels, and are very likely to become again the seat of ulceration.

Now, all these several characters of the disease,—the languid, inactive, lingering inflammation,—the amorphous lymph, destitute of contractile or organizing force,—the thin ill-formed pus,—the facility with which ulceration invades the tissues,—and the slow or imperfect reparation, constitute the peculiarities of scrofula—the differences, in short, between it and the other varieties of inflammation; and these differences are just such as we should expect to find from the particular constitution of the sufferers. Moreover, they are proportionate to the degree in which the constitution varies from the healthy type. There is no well-marked outline between scrofulous and ordinary inflammation, but the one passes into the other by such insensible gradations as to show evidently that there is no essential distinction between them, and, as I have just said, you will find these gradations corresponding very closely with the appearance and constitutional character of the patient.

I have been thus explicit respecting the pathology of scrofula, because, although really a simple matter, it is one concerning which much misunderstanding exists in the profession as well as with the public; and you are likely to be much perplexed in your reading by the various views propounded with reference to it. I think I have given you sufficient reasons for rejecting the opinion of those who regard it to be a specific disease. I have told you to what extent it is to be considered an hereditary affection, and I have warned you against mistaking a part for the whole, by limiting your ideas of it to a disorder of the digestive system or an imperfect assimilation of albumen. The summary of what I have said respecting the pathology of this disease may be given in a few words:—*scrofula is the inflammation natural or proper to the scrofulous person; the scrofulous person being one in whom there exists an inherent or congenital want of energy of nutrition, showing itself more or less in all its departments in the primary, and secondary assimilative processes, in development and in growth.*

With regard to the treatment of scrofula, if it be not a specific disease, you must not expect to find a specific remedy. If you imagine that iodine, or cod-liver oil, or any other medicine is to prove a panacea in these cases, you will find yourselves greatly mistaken. In no department of therapeutics has the treatment of a disease by name been more deleterious than in the management of patients suffering under this disorder. An ulcer is pronounced to be scrofulous, and it is therefore at once judged to be incurable, and deserving no further attention; or the surgeon fires away at random his iodine, cod-liver oil, and bichloride of mercury, without reference to the particular condition of the patient, and at last gives up the case in despair, never conceiving the possibility of his remedies having been inappropriate or ill-timed. It is a scrofulous ulcer, and he has treated it as such. Now, in the superintendence of these cases, it is necessary to bear constantly in mind that you have a very delicate class of patients to deal with, persons of much susceptibility to impressions of various kinds, on whom slight causes produce considerable effects, and that therefore great nicety of discrimination is required in apportioning the doses, as well as in selecting the medicines; and much careful attention must be given to the diet and general management. Further, the disease being of a constitutional nature, you must be content to exercise much patience, and do not delude yourselves into the expectation of working heroic cures.

When a scrofulous child first comes under treatment on account of a local disease, whether it be an ulcer on the skin, inflamed eyes, enlarged absorbent glands, or other affections, there is mostly to be found some disorder of the digestive organs, such as a furred tongue, irregularity of the bowels, tympanitic state of abdomen, &c., in addition to the evidences of general debility, which I have pointed out to you. There are, therefore, three objects of consideration:—the local disease, the constitutional delicacy of the child, and the disorder of the digestive system. Of these, the last presents the greatest claim to our immediate attention, because it is more under control than either of the other two, and because it is very frequently the exciting cause of the local disease, which may subside when it is rectified. In order to effect improvement in this particular, it is necessary to enforce strict attention to diet, which is often no easy matter, for the child's appetite is, perhaps, voracious, and the friends are disposed to indulge it, under the idea that it is a good sign, and in the hope that a liberal supply of food will give health and strength. I need scarcely say how erroneous is this impression. There can be no doubt that a very large number of scrofulous complaints are excited and maintained by this habit of over taxing the digestive system, and the consequent admission into the circulation of crude, half-assimilated, alimentary materials. You will find that there is no plan of treatment so successful in the majority of cases, as that of enforcing a spare and well regulated diet. Meat should be taken by adults once a day, at an early dinner; and to ensure its being well digested, the patient should be allowed besides,

only bread and a small quantity of vegetable, at that meal. With children milk is a desirable article of food, and may be taken at breakfast time, but not in large quantities. You are, perhaps, aware that the quantity of gastric juice secreted is proportionate rather to the wants of the system than to the amount of food taken, so that for complete digestion the diet must not exceed the requirements of the system.

When the tongue is furred, the bowels irregular, and the urine high coloured, much assistance will be derived from the exhibition of mild doses of mercury and rhubarb every night, or every night and morning for some days. Under this treatment alone you will find a considerable number of scrofulous cases will get well, more perhaps than under any other plan you can try.

The next indication is to adopt such measures as may promote the general health and invigorate the system. This is best done by exposure to fresh air, with abundance of light, cold bathing, plain, moderately nutritious, unstimulating diet, exercise and early hours, not allowing too long a period for repose, which engenders rather a sluggish indolent state of the nutritive functions. I believe it is best, in the first instance, to give these natural tonics a fair trial, for they are more effectual than the artificial or medicinal tonics, and they lose their effect less quickly. It is, however, often necessary to have recourse to the latter, and you will find the bitter infusions—quinine and iron—given in small doses, very serviceable in such cases.

It is generally necessary to intermit the tonic treatment after a time, either because it loses its effect, or because a preternatural fulness, a kind of plethora is induced by it, which the delicate scrofulous system is unable to bear; and unless the treatment be altered when that is the case, relief from the superfluous accumulations is obtained either by the aggravation of the local disorder, or by the formation of some new disease. The pulse becomes quick, the face flushed, the tongue coated, all which symptoms warn us that a fresh outbreak of scrofulous inflammation, an attack of erysipelas, or some other disorder may be expected, unless we take timely precautions to prevent them.

I do not know in what manner iodine acts upon the system in scrofulous cases, nor have I observed such great benefit from its employment as Lugol and other writers would lead us to expect. Surely no one medicine ever had so fair a trial in the treatment of any one complaint as iodine has enjoyed for some years in scrofula. It has been regarded as the specific, and has been almost universally employed; but that it has not realised the expectations that were entertained of it is fully proved by its giving way in the last few years to another rival, which is now in the ascendant on the wheel of fashion. I have never been able to decide in what cases iodine was most beneficial, or when to prescribe it with confidence. So far as my own experience goes it is of less value than the ordinary tonics—quinine and iron—in the treatment of scrofula, and of far less value than a regulated diet, a tonic regimen, and alternative doses of mercurial medicine. I have found it most useful when combined with iron in the form of the

syrup of the iodide of iron, from which, given in doses of a drachm or a drachm and a half, three times a day, I have seen more benefit than from any other remedy of the kind.

Of the cod-liver oil which is now so extensively employed I cannot yet speak with certainty. It sometimes answers remarkably well, but I have not been able to decide in what cases it may be prescribed with greatest prospect of success, nor have I found it so generally beneficial as it appears to be in the hands of other persons. I think its good effects in improving the general health, fattening the patient, and checking the local disease, are more marked in cases of tuberculous phthisis than in the ordinary forms of scrofula.

The scrofulous disease being so much dependent on the state of the health and the disorder of the digestive system, the local treatment deserves only the third place in our estimation, and does not require much attention till we have done our best to rectify those defects which are the primary and fundamental features of the case. Under the general treatment, which I have mentioned above, the local ailment may be usually left to itself, and will often get well. But if the former be neglected a variety of applications may be made in vain, or the disease is driven from one quarter only to make its appearance in another. Of the local remedies that may be advantageously employed under certain circumstances, I will speak when considering some of the manifestations of scrofula in particular regions of the body, which I purpose doing in the next lecture.

In many instances the scrofulous disease seems to serve as a vent whereby morbid accumulations are eliminated from the system. When, under such circumstances, it has existed for a long time, and has become essential to the health of the body, we are obliged, as in the case of other chronic inflammatory affections, to furnish some substitute, if we are anxious to get rid of the existing disorder. Hence it is that permanent counter-irritation by an open blister or a seton becomes one of the most effectual means of curing an old scrofulous disease, indeed it is often the only treatment which makes any impression at all. The various measures above described should be fairly tried before resorting to this, for it is, after all, but a sorry makeshift to cure one disease by substituting another, especially as it sometimes happens that we add a second malady without curing the first. Nevertheless, I do not think the objections to these artificial drains, when other means have failed, are so great as they are imagined to be, because if they do not succeed in effecting a cure, they are easily stopped, and no harm is likely to ensue; and if the result is more fortunate, they cannot be said to habituate the system to depend upon relief from a local discharge, any more than the disease had done for the cure of which they were employed.

ON A PECULIAR ERUPTION ON THE ARMS AND HANDS,

CAUSED BY THE IRRITATION OF THE APHIS INFESTING THE RED CURRANT.

By T. OGIER WARD, M.D., Oxon.

In the *Provincial Journal* for September 22nd, 1847, there is a case of "spasm" apparently of the muscles concerned in respiration, from inhaling and swallowing the dust from the dried bodies, with their exuvæ and excrement, of the "pea blight," or aphid infesting the pea plant.

Besides this instance, I am not acquainted with any cases in which these particles have produced injurious effects in persons exposed to their influence, and hence I think the following case is worthy, from its rarity, of being placed upon record:—

On the 6th inst., an under gardener of Lord Holland, with his boy, was engaged all day in gathering red currants from some bushes that were much blighted by the aphides, and were wet and dripping with rain. While thus occupied, they raised the boughs with their left hands whilst they gathered the fruit with their right, and in so doing their arms, which were bare, were covered with a quantity of black dust, which in consequence of its being wet with the drippings from the boughs, adhered firmly to the skin, nearly to the elbow of the left arm, and to the middle of the right forearm, and remained thus till they washed themselves on quitting their work in the evening.

The next morning the under gardener observed his arms to be red and tingling, which was followed by an eruption of vesicles upon those parts that had been covered by the black dust. This irritation continued to increase for two days and lasted about a week, terminating in some places by desquamation of scales resembling those of eczema, leaving the skin beneath thickened, red, and shining; in others, from which all appearance of inflammation had subsided when I first saw the man on the 16th, the skin was stained in streaks, spots, and patches of a purplish brown, resembling in colour the stains of a weak solution of nitrate of silver, but in form and general appearance the marks were such as leaves dripping with colouring matter would leave on his arms while brushing through them. At this time only a few crusts and elevations of the skin in streaks remained, but the discolourations were so remarkable that all his neighbours were enquiring the cause; although from constant exposure to the sun his arms are tanned of a deep brown.

The boy was affected in a similar manner, but not so severely, nor to the same extent; and his arms are now nearly free from any spots or streaks; but his father's are still almost as much discoloured as when I first saw him, and where the eruption was most violent the cuticle is still thin, red, and glistening.

The general health of both man and boy was quite unaffected during the continuance of the complaint, which was treated by bathing the affected parts with warm water.

The father says that he has never suffered in a similar manner, although he has had his arms covered by the blight while wet on many occasions, as he worked for many years in a market gardener's fruit garden. Nor can I hear of any similar complaint having been suffered this year or at any other time by gardeners and others when brought in contact with the aphides. My own skin being easily irritated, I asked the gardener to procure me some of the infected boughs, which I rubbed and beat upon the backs of my hands; but they produced no irritation, though this might be because they were dry, and none of the aphides themselves, but only their exuvie and the black dust, which I presume to be their dried excrement, remained on the leaves.

It would be interesting to ascertain whether, in the north of the kingdom, where the currant blight may still be found, it possesses this season any peculiar acrimony.

The excrement of the various kinds of aphids, under the name of honey dew, is the favourite food of ants (which are said to tend the aphides as their milch cows), as well as of other insects, and I can testify from having tasted it that it is a sweet and bland substance, even after it is dried upon the surface of the leaves on which it has fallen. I have examined some of the dust with a half-inch power, but I can only detect some inorganic matters, with fragments of the skins or sloughs of the insects, and some globular bodies about the size of mucous globules, but without nuclei.

Perhaps some of the members of the Association residing in places where the currant blight exists, may turn their attention to this subject, and communicate the results.

Kensington, Aug. 31, 1849.

CASE OF TRAUMATIC TETANUS.

To the Editor of the Provincial Medical and Surgical Journal.

SIR,—Should you consider the accompanying case (which has just occurred in my practice) worthy thereof, will you give it a place in your Journal.

Yours obediently,

SAMUEL DYER.

Ringwood, September 29, 1849.

CASE.—James Hemsbridge, aged 44, labourer, of sound constitution, has enjoyed good health from childhood, with the exception of an attack of continued fever, which he had three years ago. On the 17th September, 1849, whilst digging potatoes he wounded the inside of the great toe of the left foot with the prong. It gave him but little uneasiness at the time, and he neither applied for medical advice, nor did anything to it himself beyond the immediate application of tobacco, which some of our rustics deem a panacea for all wounds. On the eighth day from this he first felt a degree of stiffness about the muscles

of the neck and chest, and was unable to go on with his work, which he had hitherto continued; found he could not stoop, and could only touch the ground with his hand by kneeling.

September 25th. I first saw him at eleven this morning. He was dressed, and sitting on the edge of his bed; said he had sent for me as he had a cold and stiff neck. Upon his attempting to comply with my request by protruding his tongue, I could not fail to detect the serious nature of the case, and upon close enquiry elicited the history of the trifling accident I have just alluded to. The small puncture in the toe was just discernable, as being all but healed. There was tonic spasm of the muscles of the neck and jaw, those of the limbs not affected. I gave him immediately ten grains of calomel. On visiting him with my father, two hours afterwards, we found the symptoms gradually increasing. He now complained of pain in the back, and could only bend it, or move his head with much and long continued effort. Without difficulty we put him under the influence of chloroform, and kept up its effects a quarter of an hour. During this time the muscles appeared to relax, but I could not by any force depress the jaw, nor could he open his mouth much wider on regaining his senses; he, however, said he felt more easy. Sickness now came on, and the painful efforts to vomit declared the nature of the malady as much as anything. He took two ounces of wine through a quill, and repeated this, milk, or strong soup, every hour.

At 5 p.m., we again put him under the influence of chloroform as easily as before, and kept him another fifteen minutes in a quiet sleep, and upon the effect of the drug ceasing, he once more declared himself easier, but the spasm continued as before.

At eight o'clock we used the chloroform again, with just the same result, though I kept up its effects longer; and once more at eleven, when I gave him Liq. Opii Sedativi, grs. xl. He passed a quiet night, sleeping occasionally, but the symptoms have increased; the jaw is more closely and permanently fixed, so that he cannot separate the teeth; the trunk is stiff, all the muscles of it seemingly affected, and no individual set, so as to produce opisthotonos, or the reverse. The legs are semiflexed, widely separated, and he cannot move them without help. Over the upper extremities he has more power. I now tried to give him his medicine and wine through a gum elastic catheter, passed behind the last molar tooth, by means of a small syringe, but could only succeed in getting these fluids into the mouth; and as the muscles of deglutition were affected by the spasm, the unsuccessful effort of swallowing added greatly to the poor man's distress. He died at half-past nine, p.m., 48 hours from the commencement of symptoms of tetanus, I fancy from the respiratory functions becoming seriously impeded. I am induced to forward this hasty sketch from having read the account of a case of tetanus, attended by a successful termination, reported in a late number (September 5th) of the *Provincial Medical Journal*, by Mr. S. G. Sloman, in which he used chloroform; and in

accordance with his request that the effects of this remedy in such cases may be reported—a request with which all must be ready to comply who meet with instances of the kind, as it is only by collecting facts from practice that the success or failure of a remedial agent can be properly and fairly estimated; and as it is not often that British surgeons meet with instances of tetanus, I feel no hesitation in at once making this case public.

The success of Mr. Sloman's case cannot be solely attributed to the inhalation of chloroform, for it appears that, upon the fourth time of using, its good effects had lessened; and on the fifth time, Mr. Sloman says: "as the chloroform appeared to be somewhat losing its effect, I gave him five grains of calomel, and half a drachm of the solution of bimeconate of morphia, which latter was repeated every two hours, and the calomel every four hours;" and chloroform seems to have been used no more.

In the instance which has just fallen under my care, I confess that at first I was very sanguine, and hoped much from the use of an anæsthetic remedy. At first it appeared to benefit, and in so far as relief to suffering was concerned, it certainly did, but most decidedly, beyond this, it did no good.

My idea is, that chloroform acts mainly upon the cerebral system, and not upon the spinal. In tetanus, the functions of the cerebrum seem untouched—the medulla oblongata and spinal system the principal seat of mischief. Chloroform, then, I presume, must not be expected to cure, though all must confess its great utility as an adjunct in lessening the suffering of such cases, in which inhalation is almost the only means by which we are enabled to administer relief.

EXTENSIVE BURN

SUCCESSFULLY TREATED WITH THE SOLUTION OF
NITRATE OF SILVER.

To the Editor of the *Provincial Medical and Surgical Journal*.

SIR,—Should the following case deserve publication, it is much at your service for insertion in the *Journal*.

Yours most respectfully,

THOMAS BROWN.

Castle Donnington, Sept 22, 1849.

CASE.—Edward Ironmonger, coming in contact with the fire, received a severe burn, which extended over the sternum, ribs, arms, neck, and face; he presented a frightful object, his face and head appearing more like a foot-ball than otherwise. There was serious invasion and destruction of the soft parts, and an entire obliteration of the features. Being called in half an hour after the accident, I at once applied a solution of nitrate of silver, according to the formula of Mr. Higginbotham, of Nottingham, and enveloped the parts in cotton wadding; considerable depression of the vital powers took place, with dyspnoea, and dissolution was for some time threat-

ened, but by the use of opium and wine, re-action at last took place. So soon as the sloughs began to separate, (leaving portions of the ribs and elbow-joint denuded,) I applied an ointment, consisting of equal portions of Cer. Resinæ and Calaminæ, repeating the dressing every morning. This application was soon followed by profuse elimination of laudable pus, but this discharge becoming too profuse, a portion of finely-powdered chalk was ordered to be dredged over the granulating services. To remedy the fungoid condition of the granulations—a condition very frequently noticed after burns—the solid nitrate of silver was applied, with the usual advantage. After each dressing, pressure was made with rollers, and during the healing process, flexion of the arm was practised to prevent contraction. During the profuse secretion of pus, there was great prostration of strength, and wine and beef-tea were ordered, *ad libitum*. With this mode of treatment success followed, and much less contraction has resulted than might reasonably have been expected.

P.S. The injury was received January 1st, 1849, and cicatrization was complete March 7th.

DISLOCATION OF THE HIP-JOINT

REDUCED UNDER THE INFLUENCE OF CHLOROFORM.

To the Editor of the *Provincial Medical and Surgical Journal*.

SIR,—If I mistake not, cases are on record in which the anæsthetic effects of chloroform have been successfully employed in the reduction of dislocations; such facts are not, however, so numerous as to render an additional one unimportant.

I remain, Sir,

Your most obedient servant,

T. M. GREENHOW.

Newcastle-upon-Tyne,

September 1, 1849.

CASE.—Catherine Scott, aged 46, a stout muscular woman, was admitted into the Newcastle Infirmary early in the morning of August 26th. In a state of excessive intoxication she had walked out of a three-story window, three or four hours previous to her admission. She complained much of pain in the back and hip. On examination she was found to have sustained contusions of the hip and loins, and the right femur was dislocated on the dorsum ilii. At about ten o'clock she was placed fully under the influence of chloroform, and the reduction was effected with remarkable ease, by fixing the pelvis with a groin strap, and making extension in the ordinary manner, by means of a towel fixed above the knee.

From the robust figure of the patient, I feel convinced that, without the relaxing effects of the chloroform, much greater force must have been required to replace the joint, which could perhaps scarcely have been accomplished without the assistance of pulleys.

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER
THE CARE OF PROFESSOR SANDS COX, F.R.S.,
SENIOR SURGEON.

Reported by THOMAS WHITTALL, Esq., Resident
Medical Officer.

CASE II.

CHRONIC SYNOVITIS.

Mary Wellsby, aged 19, housemaid, of a ruddy complexion, and healthy appearance, admitted Oct. 1st, under the care of Professor Cox. Complains of a dull aching pain in the right knee, accompanied with a sense of weakness in the joint. The pain is aggravated on the slightest motion of the joint, and there is at the present time a considerable swelling around the knee, which is soft and puffy to the feel, and observed more particularly at the sides. The integuments around the joint have a dusky red appearance, and the patella is protruded forward. The constitution does not appear to sympathize with the local affection. The health is reported to be good; pulse 80; bowels moderately open.

History.—Patient states that she is a housemaid, and is accustomed to a good deal of kneeling, and to running up and down several flights of stairs. Her attention was first directed to the knee in July last, in consequence of pain, which was felt when she went up and down the stairs, or when she had occasion to walk any distance. She observed no swelling nor discolouration at this time, but by degrees the pain became more severe, until she could bear no motion in the joint. In the meantime, a puffy swelling, with discolouration of skin appeared, and has continued to increase up to the present time. She has frequently had rheumatic pains in her limbs after exposure to cold, but has never had rheumatic fever.

Appl. Pigment Iod. omni mane. R. Mist. Salinæ, oz. viij.; Capiat. oz. j., ter die.

11th.—Pain is not diminished, and the swelling appears to be slightly increased. Catamenia are reported to be irregular. Cont. Pig. Iod. R. Mist. Aloes Co., oz. iij.; Mist. Ferri. Co., oz. v. M. Capiat., oz. j., ter in die.

18th.—Pain remains unabated, and swelling appears to be rather firmer. Cont. omnia.

25th.—Pain diminished; swelling about the same as when last noted. Cont. omnia.

November 1st.—No change since last note. Cont. Mist. Appl. Emp. Lyttæ, part. affec.

4th.—The blister rose well, and has almost healed; there is a superficial soreness caused by the blister, but the joint itself is less painful, and the swelling is slightly diminished. R. Pot. Iod., dr. iij. ss.; Aquæ. oz. viij.; Fiat. Lotio. et sæpe. utetur. To take one or two Pil. Purg. occasionally, and discontinue the mixture.

9th.—Pain diminished, and slight motion can be permitted in the joint without any considerable pain. Swelling diminished. Patient complains of nausea, and want of appetite. R. Inf. Columb., oz. viij; Pot. Bicarb., dr. j. M. Capt., oz. j., ter in die.

12th.—Pain is diminished, and more motion can be borne; swelling is also diminished, and more strength is felt in the joint. Appetite has improved. Cont. omnia.

18th.—Pain is diminished; but the swelling is about the same as before. Blister to be repeated, and kept open with savin ointment.

24th.—Blister rose well, and discharges freely; the swelling has not so much of the puffy feel which was before marked. Cont.

30th.—Continues to improve; blister has been permitted to heal; patient is able to walk about without pain. Swelling is greatly diminished, and the knee is not much larger than that of the other leg. Patient is able to walk for short distances without pain.

Discharged cured.

REMARKS.—The peculiar liability of persons of a rheumatic diathesis to be affected with inflammation of the synovial membranes is remarked by all surgical writers. More especially is this the case with such persons when some exciting cause is also present. In this case it would appear that the predisposing cause of the affection of the knee was the rheumatic diathesis, while the exciting cause was pressure upon the joint by kneeling; and it is not at all improbable, that if the predisposing cause had not existed, the exciting cause would not of itself have been sufficient to excite diseased action. It is upon this principle that we are enabled to account for what would otherwise be mysterious. How is it that two individuals shall be exposed to the same exciting cause of a disease, the one is affected, the other escapes? in the one there was a predisposition to the disease, in the other no such predisposition existed. The predisposing cause in the case we have just reported, appears to have been the chief agent in determining the affection. Sir Benjamin Brodie observes: "That inflammation of the synovial membranes from constitutional causes, is generally less severe than other forms of it; for, though it produces an increased secretion of synovia, there is usually no effusion of fibrin, nor any material thickening of the synovial membrane."* This observation is supported by the evidence of the case under observation, which, although not entirely, was chiefly dependent upon constitutional causes, and in which the symptoms throughout were by no means violent, the case being altogether one of a chronic nature, and the swelling was of a different character from that which is noticed to succeed effusions of fibrin. The efficacy of blisters, in cases where the inflammation is one of a chronic kind, and the effusion chiefly fluid, is here well shown; they appear to prove beneficial, partly by the counter-irritation which they set up, and partly by the discharge which follows their application.

* Pathological and Surgical Observations on Disease of the Joints.

Provincial Medical & Surgical Journal.

WEDNESDAY, OCTOBER 17, 1849.

THERE are few subjects that have been considered of more importance to mankind than the preservation of health and the removal of disease. Disease may be said to comprehend every deviation from the natural structure and functions of the various organs of the body; it always induces more or less alteration in the feelings of the individual, and always tends to lessen the enjoyment, and probably to shorten the duration of our natural existence. Sometimes it is limited to derangements of function, producing temporary discomfort and incapacity; at other times it occasions organic alterations of structure, which render us permanently subject to its influence, and compel us unwillingly to succumb to its power. In both instances it warns us that we are under punishment for the transgression of the laws of our Creator. Whatever may be the determining causes of functional or organic disease, there can be no doubt that disease originated in sin, and that it was sent into the world as a warning against, and a punishment for, sin. It is a weapon wielded by the Almighty, which he uses mildly for our correction, and powerfully when we rebel against his threatenings; but like all other divine punishments it is tempered with mercy, human knowledge and human means having been made instrumental, to a considerable and increasing extent, to the alleviation of evils entailed upon us by disease. With the exception of our first parents before the fall, no people, community or nation in the world has been, from the time of Adam's transgression to the present, exempt from the ravages of disease; its influence has been, and is, universal; and although, in all ages, men of great talents and acquirements have devoted their best energies to control and remove it, success in the art of curing disease is still limited and imperfect. At the present day we find considerable attention paid to this momentous subject; we find learned men of all countries striving to attain such knowledge as may enable them to combat successfully with those inflictions of Providence which, like cholera, spread devastation around us. It cannot be said that we have not succeeded to a greater extent than our forefathers, but yet when we make a comparison between the amount of knowledge we now possess,

and that of the Greek and Roman physicians in former times, we are obliged to confess that the progress we have made in the healing art bespeaks the inability of man to cope with, and the insufficiency of art to counteract, the dispensations of Providence. Our thoughts have been led in this direction by the contemplation of the inefficiency of medical science to remove the frightful calamity which is now visiting our own country; although we have been greatly favoured in comparison with some other nations, yet have we to lament the loss of thousands of our population, as well as some of the ornaments of our profession; and notwithstanding the great amount of attention brought to bear upon the subject of cholera, our knowledge of everything connected with it, except the history of its progress and the number of its victims, is in the greatest degree of confusion and obscurity. In the midst of darkness, however, a gleam of light may one day appear, and some happy discovery as to the cause of cholera, may disarm it of half its terrors. At present, the most successful means of staying the progress and lessening the severity of the great pestilence, has been the removal of those moral evils, poverty and impurity, which abound amongst our population; but if the investigations of medical men be permitted to discover some direct medicinal means of curing the disease itself, the relief obtained by the removal of filth and destitution will be perfected by the restoration to health, of those who may henceforth be sufferers from this serious and rapidly-fatal malady. The importance of such a discovery would be incalculable; reasoning from past experience, however, the discoverer might not be rewarded according to the magnitude of the benefit conferred upon the public; but should the world prove ungrateful, his more estimable reward would be the consciousness of having benefited his fellow-creatures, and reflected honour upon his own profession.

The above sentiments had scarcely been committed to paper, when a subject was presented to our notice which, though as yet imperfect in its details, is sufficiently interesting at the present moment to warrant us in commending it to the attention of our readers. We allude to the discovery, by Mr. Brittan and Mr. Swayne, of certain fungoid organisms in the "rice-water" discharges of cholera, as well as in the atmosphere of infected districts.

That epidemic diseases in general originate in the presence of vegetable or animalcular parasites, has long been a favourite theory, and has quite recently been made the subject of a special essay by Dr. Mitchell, of Philadelphia.

The same view as regards its vegetable origin has been taken of cholera in particular by Dr. Cowdell, of Dorchester, and others. But though "coming events" have thus "cast their shadows before," the positive demonstration of facts substantive of this doctrine, have been few, and have failed to attract any great share of attention. In respect of cholera, it may be stated that Donnè had noticed the existence of a species of *vibrio* in the rice-water evacuations, and that the fact has since been confirmed by Pouchet, (*Comptes Rendus*, Avril, 1849,) and by Mr. Burnett, an American, who describes them as special bodies, of 1-12.000 to 1-8.000 of an inch diameter, when seen singly, and possessing great activity of movement.

We mention these observations merely to show that the attention of microscopists has some time since been directed to the presence of peculiar bodies in choleraic discharges. What immediately concerns us at the present time is, the announcement that certain organisms, of coniferoid aspect, are constantly seen in these fluids, as well as in the air of infected localities condensed for the purpose of examination. These organisms are likewise described as of a circular figure; they vary in dimensions and development, according to the source from which they have been obtained, being 1-1.000 of an inch diameter as seen in the atmosphere, 1-3.000 in the vomited matters, and acquiring a diameter of from 1-1.000 to 1-500 of an inch in the intestinal fluids. They are said to exhibit a double outline, with a centre filled with granules, and are well represented in the wood-cuts which accompany Dr. Brittan's paper, (*Medical Gazette*, Sept. 28th.) The interest attached to this discovery does not, however, rest here, for it would appear that our associate, Dr. W. Budd, has met with the same bodies in the water consumed in the cholera districts; and Dr. Cowdell has announced their presence in the perspiration of cholera patients.

We shall not attempt to predicate what import these discoveries are destined to assume as pathological data. Prone as is the human mind, unless well disciplined, to jump to conclusions, especially when, as in the present case, its

saltatory efforts are too likely to be encouraged by a natural and excusable hope that we are at length about to unravel the mysteries of the origin of the pestilence, the assumption will doubtless be, that in these little annular bodies, taken into the system in the water consumed, we behold the *fons et origo mali*; indeed, if we mistake not, this idea has already been urged by Dr. Budd, although Mr. Brittan has maintained a wise reserve upon the subject. Thankful should we be were it possible to regard such a view as a legitimate deduction from the premises advanced, for then should we have this fell disease as completely under our control, as it may suit the designs of Providence that disease should be under the control of human efforts; but objections force themselves upon us *in limine*, which induce us to pause ere we can admit that we are so near the solution of the enigma which has for so many years baffled all attempts at its comprehension. Not only must these identical observations be confirmed by other inquiries, but it must be positively ascertained that these bodies do not exist in healthy fæces, or in the evacuations in other diseases. This has yet to be done. Again, a most important link in the chain of evidence necessary to exhibit the agency of these annular bodies as the cause of cholera, is their discovery in the blood; without this there is nothing to determine that they are not the effects of the choleraic poison, rather than an integral portion of the poison itself. Other objections suggest themselves to our mind, which it would at present be premature to enumerate; enough has, we think, been said, without inculcating an irrational scepticism, to show the necessity of exercising some caution in our appreciation of the value of the present inquiries; we would, however, in the meantime, congratulate Mr. Brittan on having struck upon a track which may probably lead to results of incalculable importance, and we trust that among the members of this Association there will be found many who are both able and willing to aid him in his investigations.

INQUIRY ON THE OPERATION OF CRANIOTOMY.

To the Editors of the Provincial Medical and Surgical Journal.

GENTLEMEN,—My letter addressed to the members of our Association only went so far as to respectfully

request from every member, a return of the number of craniotomy 'operations' he had performed, with the account of the maternal mortality. It was, however, my intention, although perhaps, not so explicitly stated, that each communication should be directly made to me, and not through the Journal, with the name attached, as a guarantee of its accuracy, to be used, or not, in the table, when published, as the correspondent might wish. This suggestion has been understood by some, but, I fear, not by the great bulk of the members. My object was to form a large statistical table on this most important subject, not for my own satisfaction, but for that of others. My opinion is, that the question, whether *craniotomy* should be had recourse to only as an operation of necessity, and the *Cæsarean section* as one of election, cannot be settled by any evidence which can be now obtained, on account of the nature of the principles which have been allowed to guide practitioners in their judgment as to whether, or when, the *Cæsarean section* should be performed. It was not my intention to invite opinion or provoke discussion, but merely to ask for a candid and unprejudiced statement of facts, (of successful or unsuccessful cases) of those in which the operation was, according to recognised rules, justly, or unjustly performed; but notwithstanding, I beg to thank Mr. Ley for his letter.

For many years I taught the same doctrines as those entertained by him, and which are to be found in all British obstetric writers; but my opinions upon this subject have now been changed for several years, and, although they are opposed to those of British writers, I have had the boldness to bring them forward (Lectures, 1843.—Letter, *Prov. Med. and Surg. Jour.*, Vol. 8, p. 510, 1844.—Essay on the value of Embryonic and Foetal Life, &c., *British Record*, 1848,) and shall continue to advocate the same, as I feel convinced that they are based on principles of justice and humanity, in reference to the relative value of the lives concerned,—of their interest, and to the other contingent relative circumstances; and further, if they are acted upon, the obstetrician will stand in a much more honourable position.

At the time when I delivered the course of lectures just mentioned, I had only the statistics furnished by my valued friend, Dr. Churchill, in his excellent work "On the Theory and Practice of Midwifery;" Mr. Barlow's (reputed), and Mr. Knowles' (successful) cases of *Cæsarean section*; and the evidence of the safety of abdominal sections from the results of other operations, to support my opinions; but now I am further encouraged to believe that my views are correct, by the successful issue of two cases of *Cæsarean section* in my own practice. Mr. Ley states that he had "performed the operation of craniotomy five times on one woman with deformed pelvis," and it is quite certain he may have a chance of doing her the same service in many other succeeding labours, if her age is within, and not far advanced towards the limits of child-bearing. Some women bear an immense number of children; it has been my privilege to attend females in their labours who have had 10, 11, 12, 15, and in two instances, 21

children born. Mr. Ley remarks "I believe that the latter (craniotomy) is performed more frequently than it should be, but it is perhaps better thus than that more valuable lives should be sacrificed." I think with you, that Mr. Ley "has himself furnished strong proof of the necessity of inquiry,"—he has brought evidence enough to make every right-thinking professional man pause and re-consider this question.

The destruction, by craniotomy, of a number of infants, in different women, in successive labours, both in the practice of other obstetricians, as well as those which happened to myself; the ignorant and groundless adoption of this murderous operation; the unprofessional and disgraceful manner in which I have known it performed;—in one case the head was opened by a pair of scissors, which were obtained from some part of the family; in another case by a penknife—the operation done without a consultation; children dragged alive through and from the pelvis, mangled in different degrees. In one the scalp lacerated; in another the bones fractured and perforated, and the brain partially discharged; in a third the eyes protruded, and the face was otherwise disfigured. These circumstances, along with others, induced me to think there was a change of practice required.

The denunciations I have elsewhere used against this horrible practice I will not introduce here, but will conclude this letter by a quotation from a writer who does not entirely agree with me. Dr. Bedford, in his remarks on Chailly's opinion of the seriousness of the *Cæsarean operation* says: "The *Cæsarean section* is, undoubtedly, a dread alternative for the accoucheur to choose, but I cannot agree with Dr. Chailly, that its fatality is as great as he represents, nor am I disposed to adopt the opinion (unfortunately too general) that craniotomy is almost always to be preferred to the *Cæsarean section*. In truth, it needs some nerve, and, for a man of high moral feeling, much evidence as to the necessity of the operation, before he can bring himself to the perpetration of an act which requires, for his own peace of mind, the fullest justification. The man who would wantonly thrust an instrument of death into the brain of a living foetus, would not scruple, under the mantle of night, to use the stiletto of the assassin. Yet, how often has the foetus been recklessly torn from its mother's womb piece-meal, and its fragments held up to the contemplation of the astonished and ignorant spectators as testimony undoubted of the operator's skill! Oh! could the grave speak, how eloquent,—how momentous,—how damning to the character of those who speculate in human life would be its revelations!

"Independently of the abuse of this operation, (craniotomy) of its unjustifiable frequency, let us for a moment look at its relative fatality when compared with the *Cæsarean section*.

"According to the statistics gathered by Dr. Churchill, among British practitioners, craniotomy is resorted to, 1 in 219 cases; among the French, 1, in 1205 $\frac{1}{2}$; among the Germans, one in 1944 $\frac{1}{2}$; the average, therefore, of these three nations will be 1 in 896 $\frac{1}{2}$. In

252 cases, 50 mothers died, or about one in every five. As regards the Cæsarean section, the same author states that since 1750, he has collected 321 operations, from which 149 mothers recovered; and that in 187 cases, where the result is mentioned, 130 children were saved, and 57 lost.

"Hence, then, we have a calculation showing that in craniotomy, where, of necessity, all the children must be sacrificed, one woman out of every five died; while, in the Cæsarean section, one mother recovered out of two and a fraction, and the success to the child was certainly most fortunate.

"But, again, we only hear of the *deaths* in the proportion of one to five of women who have been subjected to the hazards of craniotomy; nothing is said of the dreadful lacerations and destruction of the soft parts, which often entail on the sufferer distress and anguish, to which death itself would be preferable."*

I have the honour to be

Yours most respectfully,

THOMAS RADFORD.

Manchester, October 7, 1849.

P.S.—I shall not feel myself called upon to answer any further remarks which may be made on the subject of craniotomy or the Cæsarean section, as the grounds on which my opinions are founded are not clearly before the profession. It is my intention to give in a series of papers the following subjects, viz.:—On Craniotomy; on the Cæsarean section; on the Use of the Long Forceps; and on the Induction of Premature Labour and Abortion.

Proceedings of Societies.

BIRMINGHAM PATHOLOGICAL SOCIETY.

MAY 3RD, 1849.

MR. RUSSELL IN THE CHAIR.

Cancer of mamma, mediastinum, and pleura: death from pleuritic effusion.

Mr. Bindley described the case of Mrs. Thompson, aged 68, of short stature and spare habit, with but slight appearance of cachexia, she has led an active life as an innkeeper, and usually had good health. She has had three children. Has no hereditary tendency to cancer. About six years ago noticed a "small hard lump" in the left breast, moveable, but neither tender nor painful. Eighteen months ago it began to increase in size, and to be the seat occasionally of acute pain; soon after it became adherent to the walls of the chest, and oozed a little thin matter, which dried and formed a scale. In November last, dyspnoea came on, without pain or cough, and gradually increased. In January the left mammary gland was drawn up to the left border of the sternum, and adhered over the cartilages of the third and fourth ribs; it was

converted into an irregularly-shaped flattened mass of scirrhous, hollowed in the centre, and occupied by a greyish brown eschar, from beneath the margins of which a little thin pus escaped; the skin around had also degenerated. There was a mass of indurated glands in the axilla. She made but little complaint of pain. The dyspnoea was severe, but there was neither cough nor pleuritic pain. The chest was completely dull on both sides, over more than its lower half, with obscure and respiratory murmur. There was no oegophony. Above, it was preternaturally clear, with harsh respiration. The limits of the dulness changed with the position of the patient. It was a gravitating effusion.

The treatment consisted of blisters over the base of the chest, a variety of diuretics, and iodide of potassium. The kidneys did not respond. The serum remained scanty. The dyspnoea increased, till at length she could not lie down. The scirrhous mass slowly grew in size and extent. A few weeks before death the left arm became oedematous, and then the left side of the neck and face; and there was also some oedematous swellings in the legs. An attack of bronchitis supervened in the beginning of April, and she died on the 12th.

Section-cadaveris thirty hours after death.—There was a large amount of subcutaneous fat over the abdomen and chest, and an umbilical omental hernia, which had existed for some years. On making a section through the scirrhous tumour, sternum, and costal cartilages, the morbid structure was seen to have extended through the intercostal spaces, close to the sternum, into the cellular tissue of the anterior mediastinum; here it formed a large oblong mass, under the first bone of the sternum, and pressed upon the left vena innominate where it crosses the left common carotid and subclavian arteries, thus very distinctly presenting the cause of the oedema of the arm and face of that side. Cancerous matter was also deposited extensively on the parietal pleura of both sides. Tracing it backwards from the sternum, it was found on the mediastinal pleura, on each side of the vertebral column towards the base of the chest, and also over the diaphragm, as well as more sparingly on the visceral pleura, near the root of the lungs. In these situations it had a remarkable character, being deposited in small masses, resembling very much in colour and form drops of tallow. The serous membrane about these deposits was much injected. There was no lymph or fibrinous exudation; but about two pints of bloody serum in each sac. The bronchial mucous membrane was red and congested, and the tubes contained some frothy mucus. The lungs were small and condensed, crepitating but little on pressure. The pericardium and heart were sound. There was a small cancerous tubercle in the anterior border of the brain. The gall-bladder was filled with small angular concretions.

The following microscopic examination of the morbid growth was made by my friend and colleague Dr. Russell:—

The fluid expressed from the subcutaneous matter, and from the degenerating muscular tissue, consisted chiefly of small cells, averaging 1-2000 inch; some plainly nucleated, their outline very soft. In the fluid from the

* "A Practical Treatise on Midwifery," by M. Chally, translated from the French by Gunning S. Bedford, A.M., M.D., &c., 1844.

degenerating muscle, the cells were fewer; and there was abundance of oil globules. The subcutaneous matter consisted of cells, and of a fibrous stroma; the cells were closely packed in strata, strongly marked, and sharply defined; their average diameter was larger than of those in the fluid; some were double the size. The yellow fibrous element was very abundant, twisting over the surface of the specimens, and projecting from the edge in long fringes. By acetic acid the cells were little changed, but the fibrous tissue was brought more plainly into view, mostly forming large irregular areolar spaces; the yellow fibrous tissue was rendered still more distinct. The spots of matter upon the pleura presented similar structure of cell-strata, and of a fibrous stroma. The chief portion of the muscle had also assumed the same characters, but a few bands retained still, to the naked eye, their healthy character; in these the primitive fibres were only indicated by their sarcolemma, intermixed with a large abundance of fat; by adding acetic acid, a faint appearance of the natural striæ was produced.

Heart pale and flabby, its left ventricle much dilated; adherent pericardium; aortic mitral disease; much congestion of the other organs.

Dr. Heslop narrated the case of a patient lately under the care of Dr. Eccles, in the Hospital. The heart was greatly enlarged, its transverse breadth being about eight inches; its weight about eighteen ounces, by no means corresponding to its dimensions; the muscular structure pale, soft, and flabby, almost deserving the name of being friable. The pericardium universally and closely adherent. The left ventricle occupied a very disproportionate space of the surface of the heart, not merely the apex, but a considerable part of the lower border of the organ being formed by that ventricle. Its capacity was probably twice that of the opposite ventricle. The aortic valves stood out from the arterial aperture, being rendered hard and stiff by the presence of an uniformly diffused atheromatous deposit; they permitted of regurgitation to a considerable extent. Mitral valves were likewise much thickened, but the orifice was not obviously diminished. The valves in the right side healthy. The tricuspid orifice not larger than natural. The lungs slightly congested at their bases. The liver enlarged, very soft, and of a deep red hue. The spleen was perfectly diffuent, so that it was found impossible to preserve it. The kidneys were also greatly diminished in consistence. The corticle structure of a pale yellow colour, and intruding to a great extent upon the tubular cones, whose vascularity was generally exaggerated. The renal capsules slightly adherent. The microscope revealed a great amount of fat in the tubuli. The patient was a woman, married, aged 40, had had a large family; had for a long time laboured under dyspnoea; pain in the chest, cedema of the ankles, and slight ascites. On admission her dyspnoea was intense, the heart beat with but a moderate impulse, over a large space; the precordial dulness extreme; a soft, but well-pronounced murmur with the first sound, near the base of the heart; none observed with the second sound. Slight râles throughout the chest; face cedematous; belly tense and fluctuating; legs anasarous; urine scanty,

cloudy, acid, with lithate of ammonia, and yellow lozenges of lithic acid; slightly albuminous. For a few days after admission she obtained relief from the means employed, but the ascites subsequently increased, and with it the dyspnoea. The urine was again examined, and found to contain an immense quantity of epithelial scales, nuclei, and tube-casts, while it still remained albuminous; specific gravity, 1019. On the 25th of April she died. It is probable that the heart was the starting point of disease in this case. It is certain that the lungs are not entitled to the consideration of precedence in the morbid chain. To sum up this case it may be fairly allowed that the embarrassed left ventricle reacting upon the lungs was insufficient to produce anything but a permanent slight bronchitis, and did not, therefore, produce a dilated right ventricle and tricuspid orifice, but nevertheless caused permanent fulness of the venous system, and therefore, tension of their walls, enlarged liver, diffuent spleen, oleo-nephritic kidney, and dropsy.

Heart: its right side dilated and hypertrophied; tricuspid orifice very large; emphysematous lungs; other organs congested.—Clot in the left hemisphere of the brain.

Dr. Heslop related the case of a patient who died in the hospital, under the care of Dr. James Johnstone. The heart was generally enlarged and hypertrophied, but much more on the right than the left side. The right auricle was particularly dilated, and the right auriculo-ventricular orifice was capable of admitting all four fingers with the greatest facility. The lungs were extremely emphysematous; the bronchial tubes congested and filled with mucus; the liver enlarged and congested; the kidneys were in the same condition. The superficial veins of the cerebral hemispheres were distended, but to a marked degree more on the left than the right side. On slicing the left hemisphere a broken down clot was remarked, occupying the line of contact between the grey and white matter, of a convolution on the outer border of the hemisphere. The medullary matter around the clot was softened and broken down. No other morbid appearance in the brain.

The man from whom these organs were taken was a pensioner, aged 45, admitted into the hospital on the 12th of May. He had been labouring a long time under cough and dyspnoea, and latterly had become anasarous. On admission his breathing was much embarrassed; face was livid; pulse rapid and weak. The chest was universally resonant on percussion, with mucous and sub-mucous râles throughout. Heart sounds normal; jugulars permanently distended, with pulsation; legs anasarous; urine deposited a large amount of the lithates, but contained no albumen. The symptoms underwent but little change until six days before his death, when on getting out of bed to pass water he fell down, and from that moment was never able to move the right arm and leg, or to articulate a word, though he retained a certain degree of consciousness. He died on the 8th of April. In this case the disordered lungs was probably the first step in the diseased processes, which terminated in a clot in the left hemisphere of the brain.

Fluid taken from a cyst connected with the thyroid body.

Dr. Fletcher brought before the Society specimens of the fluid taken from a cyst connected with the thyroid gland, and gave the history of the case:—

Elizabeth Noon, aged 35, single, (admitted under his care into the General Hospital, April 3rd,) a short delicate-looking woman, has enjoyed good health for the most part. Eleven years ago her throat began to swell, which she attributed to her father having once pressed it with his thumb; it has slowly enlarged to its present dimensions since that period; menses regular; the tumour undergoes no enlargement at the catamenial periods; no tendency to goitre in the family. The tumour occupies the whole anterior portion of the neck, and stretches out the posterior angles. Its form is oval, its long diameter transversely, its limits very exactly circumscribed in its entire circumference; the size of a tumour that of a large Malaga orange; to the feel it is tense, elastic, and semi-fluctuating. She was ordered iodine frictions, and iodine internally. After this treatment had been followed for two or three weeks fluctuation became more evident, and it was determined to puncture the tumour. A small trocar was passed into the right side of the tumour near its outer border. Immediately a dark yellowish-brown fluid escaped, and before the cyst was completely emptied, nine ounces were drawn off. Nothing now remained of the tumour but its flabby walls. On the following Monday the cyst was evidently refilling, and there was some heat on the surface, though she did not complain of pain. The week following it was larger than its original dimensions; it was again tapped, but only eight ounces of a dark brown semi-gelatinous fluid were drawn off. It was now resolved to pass a seton thread through the cyst, which was done on the 2nd of April, 1849. The next day the tumour became greatly swollen and painful, though there was no evidence of pressure on the trachea or œsophagus; the tongue became furred; pulse quick; thirst; vomiting followed; so that it was deemed advisable to admit her into the hospital to be carefully watched. The tumour was ordered to be well poulticed and an effervescent draught administered every fourth hour.

On the 4th of April the tumour was evidently subsiding, and discharged a great deal during the night; the constitutional irritation was also diminished. The case was now transferred to Mr. Baker. The fluid first drawn off had an oily aspect, and upon standing, a stratum of oil separated from the rest of the fluid. Microscopic examination revealed an immense number of cholesterine and oil granules. The fluid last drawn was much denser than the first, and presented a less amount of cholesterine scales; it presented very much the appearance of the fluid of some old hydroceles.

Whilst under Mr. Baker's care, a great deal of constitutional irritation set in and the secretion became very fetid, and the neck became puffed up by purulent fluid and foetid gases; the seton was taken out and the punctures enlarged by extending the incisions both above and below, and another incision was also made freely into the anterior part of the cyst. By these means the purulent fluid and gases escaped, and the neck gradually became less; but she became insane,

and after being retained in the hospital in a private ward for about a fortnight, in the hope that some amendment may take place, she was removed to a Lunatic Asylum, where she had been for about a week, under the care of Mr. Green, who has reported to me this morning that her intellect is becoming much better, that she is in every way improving, and that her neck appears well.

(To be continued.)

Foreign Department.

FRANCE.

Curious Trial in the French Judicial Courts.

One of the most unheard-of aberrations of the human mind, if such it can be considered, has recently come under the cognizance of the French judicial courts; it is that of a soldier, named Bertrand, who was found guilty of violating and mutilating the corpses of females, which he contrived to exhume after burial. As an important medico-legal question arises out of the case, we extract the following details from the *Archives G n rales*:—

On the 25th of August, a girl, aged seven years, was buried in the cemetery of Irvy. Next day it was discovered that the grave had been opened, and the corpse frightfully mutilated, the intestines being entirely torn out and scattered about. The same occurrence had also taken place in another cemetery, and it was ascertained that the grave had been opened skilfully, as if by a person accustomed to the business. In this instance the body mutilated was also that of a female, and the intestines had, as in the other case, been removed by an incision through the abdominal parietes. The grave in which the victims of the insurrection in June had been deposited was likewise opened, and several bodies similarly violated.

Every attempt to discover the perpetrator of these outrages proved fruitless. Cupidity could not have been the object, as nothing could be found but wounds and mutilations of the enclosed corpses.

On the 5th of November, about midnight, the watch of the cemetery heard his dog barking loudly, but took no notice. The next morning he found that the body of a female, buried the day before, had been exhumed. Around the grave the footsteps of a man were observed. In another portion of the cemetery another female corpse was also discovered; it had been half exhumed, and a deep incision was found in the left thigh. In order to discover the originator of these profanations, a sort of infernal machine was fixed upon a portion of the wall over which it appeared that he was in the habit of climbing, and its effect was successful, for on the 15th a soldier named Bertrand was wounded severely while endeavouring to enter the enclosure. In spite of several wounds this man contrived to escape to the military hospital of Val de Grace, where he subsequently confessed his share in these mysterious and disgusting transactions.

It appears that before he entered the army this monster had been educated in theology, and that in consequence of his superior attainments he was made a non-commissioned officer in the 76th regiment of the line. He is of a small stature, pale, and appears to suffer from some internal agony. When questioned as to his horrible propensities, he said:—"I experienced an irresistible impulse to destroy. Nothing prevented my appeasing this impulse. I have exhumed as many as fifteen corpses in a single night, and after mutilating them have replaced them." The incisions noticed were made by a sabre-poignard, or with a pen-knife. He affirmed that he had no preference for the bodies of females, but subsequent enquiries discovered that this was false, and that he was guilty of further horrors, which explained the constant violation of the graves of females. This uncontrollable impulse appears to have seized him every fortnight, and was preceded by pain in the head. In the interval he was an orderly well conducted soldier. Not long after his admission into the hospital, Bertrand made the following confession to Dr. Marchal:—

"From the age of seven years I was remarked to be eccentric. I was fond of solitude; remaining whole days in the darkest recesses of the woods. It was not until the 23rd or 25th of February, 1847, that I was seized with the madness which has caused my arrest. Walking one day with a friend, we entered a cemetery near Tours, out of curiosity. A body was left half interred, at the sight of which I was seized with the desire of destruction. Making a pretext for getting rid of my companion, I returned alone to the cemetery, and dragging out the body, commenced beating it with a fury which I cannot account for, when I was interrupted by the arrival of a workman. While he was gone to inform the authorities of my violence I hastily covered up the corpse, and made my escape. In a cold sweat, and with my heart palpitating, I rushed into a wood, and there lay concealed some hours, in a state of complete insensibility. This state always supervened upon my acts of madness.

"Two days after I returned at night to the same cemetery, and not finding any utensils, I opened the grave with my hands. My fingers bled, but I did not feel pain. Having dragged out the body, I cut it into fragments, threw them in, and again filled the grave with my hands.

"Four months elapsed before I was again guilty of these acts, and I thought my passion had ceased, when in an unlucky moment I entered the cemetery of Pere la Chaise, when I was again seized with the same dark thoughts, and at once disinterred a corpse, and treated it as before.

"The events of February followed, and my regiment was removed from Paris, and was detached to a small village, near Amiens. After a few days my malady returned with renewed force, and in spite of the strictness of camp discipline, I went every night to the cemetery of Mount Parnassus, where I committed the greatest excesses. My first victim was a young girl. On a subsequent occasion I disinterred the corpse of an

old woman, and also that of a woman who had been drowned.

"I could never bring myself to touch the body of a man, but I experienced extreme delight in cutting up the corpses of females.

"On the 6th of November I was fired at by the cemetery guard, but this did not cause me to abandon my intention; after sleeping two hours on the ground I again entered the cemetery, and mutilated the body of a young girl.

"On the 15th of March, 1849, I had not had a relapse of my madness, when I, by accident, passed near the cemetery of Mount Parnassus, and curiosity tempting me to scale the wall, I received the wounds for which I am in the hospital. I have never injured a living person, but am on good terms with all my regiment."

In this confession the accused concealed a portion of the truth, refusing to confess what was subsequently ascertained to be the fact, that he had connection with the corpses before mutilating them. It appears, however, that this horrible monomania did not seize him until he had for some time indulged his destructive propensities.

The editor of the *Gazette de Tribunaux* remarks upon this extraordinary case, that he cannot agree with M. Calvi, in looking upon the man as a monomaniac, rather than as a culpable person. It is, he observes, scarcely to be believed, that the horrors committed by Bertrand, a well conducted young man, who had never given way to the debauchery of his regiment, were simply the result of a perverted generative impulse. We know that cases are on record in which the bodies of dying, and even dead, females, have been violated by the priest in attendance, and by others, under different circumstances, but in such cases the corpses still retained traces of beauty and freshness. Bertrand, on the contrary, took delight in the most repulsive forms of putrefaction. It is the fashion to attribute all horrible perversions of the generative sense to a mental disease, which enchains the will, and renders the wretched subject an irresponsible agent. We protest against a doctrine which thus excuses vices and crimes. There is nothing beyond the monstrosity of the acts to support the idea of insanity in this man; he is endowed with superior intelligence, and his moral sense on other points was not impeachable. "It is to be regretted, for the sake of humanity, that the question was not set at rest by a commission of lunacy; for if he is sane then is his punishment of a year's imprisonment a trifling, with justice; if, on the contrary, the horrid being is a lunatic, the punishment, although slight, is a cruel infliction."

ABSTRACT OF THE PROCEEDINGS OF THE FRENCH ACADEMIES.

ACADEMIE DE MEDECINE.

M. Gaultier, de Claubry, read his *Official Reports on the Epidemics of 1847*. Of thirty-one reports furnished

during this year, twenty-one, or two-thirds, refer to epidemics of typhoid fever; the other ten comprise bilious fevers, miliary sweat, intermittent fever, scarlatina, influenza, &c. The number of sick included in these reports amounts to 1240, of whom 210, or 1-6th, died. Of 905 cases, in which six is mentioned, the males were 421, females 484. The duration of the epidemics varied from one month to nine; they commenced indiscriminately in all parts of the year, so that heat and cold, dryness and moisture, seemed to have but a secondary influence over their origin. In 1847, as in former years, typhoid fever presented several forms, sometimes the simple mucous fever, at others the ataxic and more dangerous variety. In respect to treatment, the report offers nothing of interest.

M. Quevenne recapitulated his researches on *digitalis*. The principal fact elicited is the existence of other principles besides digitaline, which he denominates digitalode, digitalin, and digitalide. These do not, however, appear to have any therapeutic value.

M. Abeille, assistant surgeon to the hospital of Val-de-Grace, read a memoir *On the Treatment of Aneurysms by Galvano-puncture*. In the first part of his essay he reports the case of subclavian aneurism in a lady aged 65. The operation by galvano-puncture being determined upon, she was rendered insensible by æther, and four steel needles, of two inches long, were inserted by pairs into the sac, and attached to a galvanic battery; the poles were placed in contact with each pair of needles alternately, and the communication maintained during five minutes. The patient at first felt nothing, but soon she cried out, and became generally convulsed. The tumour diminished in volume, and became more tense, its pulsations diminished, and the radial pulse disappeared; the needles were then withdrawn. Compresses of cold water were then applied, and the patient placed in bed. Next day the radial pulse was still absent, the outer limb was cold and numbed, and the power of moving the fingers was lost. In four days the radial pulse reappeared, the tumour gradually diminished, and at the end of a week was only half its original size. At the end of two years the patient remained well.

In the second part of the memoir the author narrates a series of experiments on dogs, to determine whether electricity has the power of coagulating the blood in healthy arteries. By passing needles into the femoral vessel, he clearly ascertained that a clot was formed sufficiently firm to prevent the passage of a probe without violence. Although the blood was thus distinctly coagulated he did not discover traces of arteritis in any case, unless a false membrane which united the coagulum to the lining membrane of the vessel is to be considered as an evidence of inflammatory action.

With reference to the operation itself, M. Abeille considers that the intense pain which is produced renders it unadvisable in cases where the ligature can be used with safety. He states that unless great care be used, the arterial tissues are liable to be burned, and consecutive hæmorrhage rendered inevitable by the consequent sloughing of the parietes of the vessel.

ACADEMIE DES SCIENCES.

M. Cozè and Michel, of Strasbourg, addressed a letter referring to the existence of primitive nerve tubes, as demonstrated by injection. Their process of injecting these tubes is the following:—A piece of nerve is exposed on glass, so that under the microscope, its fibrils appear distinct and separate. It is then moistened with a drop of water; after which a few drops of chloroform, turpentine, or ether, are poured upon the preparation. The whole is covered by a thin plate of glass and submitted to the microscope. After a longer or a shorter period—from ten to twenty minutes, the nerve tubes are seen to swell, their contents to become fluid, and a current to be established through their entire length, issuing through the extremity charged with fat particles.

A paper was received on the *excitement of electrical action by muscular contraction*.

AMERICA.

Nitrate of Silver in Jaundice.

An American physician, Dr. Peebles, speaks highly of the effects of nitrate of silver in some forms of icterus. The form in which it is considered to be peculiarly applicable, is that in which the symptom depends upon a congested state of the mucous membrane of the duodenum, causing partial obstruction of the ductus communis choledochus. In such the nitrate may be readily conceived to exercise a highly beneficial effect.—*American Journal of Medical Science*, July, 1849.

Oxide of Silver in Menorrhagia.

The advantages of this medicine in menorrhagia, as first brought forward by Mr. Butler Lane and Dr. Eyre, are strongly confirmed by Mr. Thwait, of Petersburg, U.S. He considers it especially useful in those cases in which menstruation recurs once a fortnight or three weeks, and which are frequently most rebellious to treatment.—*American Journal of Medical Science*, July, 1849.

Presence of peculiar Animalcules in the Discharges of Cholera and in the Muscles.

A paper illustrative of this discovery was read June 11th, 1849, before the Boston Society, by Waldo Burnett, Esq. He describes the "rice-water" fluid as loaded with epithelial scales, both cylindrical and pavement, but beside these there appeared "thousands of animalculæ floating and sporting about in every direction. For a time I thought this must be a mere accident, but several examinations afforded the same results." By a power of 500 linear diameters, these animalculæ could be seen, some as linear bodies, others having a globular figure. They seemed allied to *Vibriones*, and by measurement the single animals were from 1-16.000 to 1-12.000, and the compound chain-like animals were 1-8000 to 1-4000 of an inch in diameter. The same animalculæ were found in the muscular tissues of cholera patients.—*American Journal of Medical Science*, July. p. 283.

General Retrospect.

PHYSIOLOGY.

Cause of Sleep.

Dr. Osborne has propounded the theory that sleep is induced by vascular turgescence of the plexus choroides. He considers that the idea is favoured by many circumstances, among which may be mentioned, the anatomical structure of the part which is analogous to erectile tissue; the known effect of pressure of any substance or fluid in producing coma; and the fact that distension of the plexus will produce pressure on the cerebral mass. The use of the ventricles he considers to be that of receiving the choroid plexus in its state of distension. In order to allow of the pressure necessary, it is required that the brain should be enclosed in an unyielding case, and here we see one of the strongest objections to the theory, namely, that in infants whose cranium is unclosed, and in whom, therefore, the pressure of the distended plexus is neutralised by the non-resistance of the cranial investments, sleep is more easily induced and more prolonged than in the adult. The theory, however, is ingenious, and is supported by cases which seem to give some colour to the authors views.—*Medical Gazette*, June 8.

PRACTICAL MEDICINE.

On the Treatment of Pericarditis.

By DR. JOHN TAYLOR.

In a communication to the Medico-Chirurgical Society, the author has analyzed the cases contained in a former paper, dividing them into two classes, those which occurred in connection with rheumatism, and those which occurred in connection with Bright's disease, or in persons previously cachectic. With reference to treatment, he has drawn the following conclusions:—

1. *Bloodletting.*

1. The duration of pericarditis increases in proportion as the time is longer between the commencement of the disease and the first bleeding.

2. The duration of the cases bled after the first four days is greater by one half than that of those bled within the first four days from the invasion of the disease.

3. The influence of bleeding was more marked in the cases in which it was copiously and repeatedly, as well as early, practised, than in those in which blood was drawn less frequently and more sparingly.

4. Pericarditis is never extinguished at once by bleeding, however early or however copiously practised.

5. In several cases the pericarditis was suspended for a limited time. The suspension in every instance was immediately consequent upon the local abstraction of blood.

6. It is probable that renal has a longer duration than rheumatic pericarditis.

7. Bloodletting must be less copious, and is more

frequently inadmissible, in renal than in rheumatic pericarditis.

8. Bloodletting probably lessens the mortality, inasmuch as it lessens the duration of pericarditis; but direct proof of the reduction of mortality is not to be obtained from these cases.

9. The abstraction of blood by venesection, cupping, or leeches, almost invariably relieved the pain at once, but not permanently. There is no reason to believe that any one form of bleeding relieved pain more effectually than another.

10. Bloodletting never lessened the frequency of the pulse, except when there were signs of the inflammation having abated.

11. The tendency to syncope in some cases of pericarditis renders it necessary to be very careful in abstracting blood by venesection.

12. Free venesection for pericarditis does not always prevent the subsequent appearance of serious inflammation in other internal organs.

II. *Mercury.*

1. The cases in which mercury was given within the first four days had an average duration less by five days than those in which it was given later.

2. The cases in which salivation was produced within the first four days had an average duration less by two days than those in which it occurred later.

3. It is difficult to determine how much of the benefit was due to the mercury, because all the patients who took mercury were likewise bled, and in almost every instance the two remedies were first employed on the same day.

4. The author is inclined to the conclusion, that the benefit was due in greater measure to the bleeding than to the mercury, partly because the duration of the disease was more abbreviated in those who simply began to take mercury than in those in whom salivation was produced within the first four days. The administration of mercury coincided with the bleeding, but the salivation did not, and the results are just what might be looked for upon the supposition that the benefit was due to the bleeding, and not to the mercury.

5. If the production of salivation had anything like the marked influence in arresting inflammation, and in promoting the removal of its products, which it is currently believed to possess, the duration of the cases of pericarditis after salivation ought to have been much less than it really was. This is proved by a detail of the cases.

(a.) Salivation was not followed by any speedy abatement of pericarditis in sixteen cases.

(b.) Salivation was followed by pericarditis in five cases.

(c.) Salivation was followed by an increase in the extent and intensity of the pericarditis in three cases.

(d.) Friction-sound ceased two days before the mouth became sore in two cases.

(e.) Salivation was followed by a speedy diminution of the friction-sound in two cases; it did not cease, however, for some days after.

(f.) The pericarditis ceased soon after salivation in

two cases; in one of them, however, it had been declining for some days before.

(g.) Mercury was given, but no salivation was produced in seven cases.

(h.) No mercury was given, nor other treatment adopted in eight cases.

(i.) Cases are detailed, exhibiting the occurrence of various internal inflammations during the time that salivation was proceeding. The cases comprise examples of endocarditis, pleuro-pneumonia, pneumonia, pleuritis, erysipelas, and rheumatism.

A conclusion rather adverse to the antiphlogistic powers of mercury having been drawn from the facts narrated, the author next examines the evidence upon which the contrary and more prevalent opinion is based, and infers that the evidence is not satisfactory. In the course of this examination, some remarks are offered upon the necessity for the application of the "numerical method" in therapeutical inquiries, and also upon the difference, and its results, between the practice of French and English physicians, in inflammation of serous membranes.—*Lancet*.

SURGERY.

Singular Distortion of the Lower Extremity simulating Dislocation of the Thigh Bone.

Mr. Warren Fincham narrates the case of a girl, aged 11, who, while getting out of a railway carriage, got her leg between the carriage and platform. On rising she felt pain in the hip and leg, and after a few minutes became unable to walk. On examination by a surgeon nothing amiss could be detected, but another, under the suspicion of dislocation, caused her to be sent to King's College Hospital, under the care of Mr. Ferguson. She was a tall healthy child. On examining the leg it was found to be an inch and a half longer than the right; the whole limb was turned outwards; there was much flatness over the outside of the hip, and the great trochanter seemed lower and less prominent than the other; there was some fullness on the inner side of the thigh, but the head of the femur could not be felt there, nor were the adductor muscles tense, and there was more motion at the hip than is usual in a case of dislocation. It seemed, however, to present most of the essential features of a case of dislocation of the femur into the foramen ovale. Accordingly, chloroform was given, with a view to its reduction. It was noticed that more convulsion than usual was produced by it, especially of the affected limb. When the patient was fully under its influence, Mr. Ferguson raised the limb, and found that the stiffness at the joint had become quite relaxed, and, on comparing it with the other, that it had in every respect regained its symmetry, and this without any extension having been made; but, as she recovered from the effect of the chloroform, it again gradually resumed its unnatural appearance. Chloroform was again given, the legs again became symmetrical; a thick pad was placed between them, and they were tied together, but as consciousness returned, the injured limb was seen gradually

to become elongated, and turned outwards. A dose of calomel, and a senna draught, with foetid spirits of ammonia, were ordered.

On the 29th the limb retained all the appearance of dislocation, and once again became natural under the use of chloroform. The medicine had not acted, and it was found that the bowels had been much confined for some days past. Calomel and colocynth, with senna draughts, were given, without effect. On the 1st of July Mr. Ferguson ordered half a drop of croton oil to be given every four hours; no effect was produced. The patient remained in bed. The leg was not quite so much lengthened, but in other respects appeared the same; *it was watched during sleep, and then retained the same position.*

On the 3rd an injection with turpentine and assa-fœtida was given, *and this produced copious stools*, and it was now found that the aspect of the limb was becoming more natural.

On the 5th and 6th she was up and walking in the ward, and on the 8th she left the hospital without pain, and walking quite perfectly.—*Med. Gazette*, April 6th.

On the presence of Spermatozoa in the Fluid of Hydrocele.

By MR. CURLING.

In 1843, Mr. Liston announced as a discovery of great interest, the presence of spermatozoa in the fluid of encysted hydrocele. The same fact was also noticed about the same time by Mr. Lloyd. During the last six years Mr. Curling has met with spermatozoa in twenty-six cases of encysted hydrocele. They were found in cysts of all sizes and in patients of various ages. Various opinions have been broached to account for this phenomenon, but before he alludes to them the author touches upon the structure of these accidental cysts, the mode in which they are formed, and their connection with the excretory part of the testicle.

The cyst consists of a delicate serous membrane, lined with tessellated epithelium, and is developed beneath the visceral portion of the tunica vaginalis which covers the epididymis. These cysts are very common, and appear in various stages, either sessile or distinctly pedunculated. When, however, instead of becoming pedunculated, they enlarge so as to form a tumour in the scrotum, they constitute the encysted form of hydrocele. As the cyst enlarges the testicle becomes displaced and the epididymis flattened.

Mr. Liston supposed that the presence of spermatozoa in encysted hydrocele might be explained by the circumstance that the cyst was a mere dilatation of a seminiferous tube. This view Mr. Curling considers to be erroneous, inasmuch as the cyst is quite distinct from the ducts, though in close apposition to them. Others have supposed that they have been accidentally introduced, owing to the wounding of a duct in the operation of paracentesis; but this is disproved by their being found in cysts tapped for the first time, and in those examined after death. Mr. Paget supposes that certain cysts seated near the organ which naturally secretes the material for semen, may possess the power of secreting a

similar fluid. This, the author states, is not warranted by physiology. The explanation which Mr. Curling thinks the most reasonable, is that of the accidental rupture of a seminal canal. The close proximity of the efferent tubes and their delicate texture seems to favour this view; as does also the fact that in many of the patients the disease supervened upon such violence to the testicle as might be supposed to have injured the organ. Spermatozoa are occasionally but very rarely found in the fluid of simple hydrocele.—*Edin. Monthly Journal*, September.

TOXICOLOGY.

Method of detecting the presence of Strychnia.

By MR. LEWIS THOMPSON.

As the following means of detecting the presence of strychnia may occasionally be found useful in medico-legal investigations, its publication can scarcely fail to be of interest. Having placed a drop of strong sulphuric acid on a piece of glass, add to it a small quantity of the suspected substance, and stir the whole together, so as to favour solution; then sprinkle over the mixture a little powdered bichromate of potash, and gently move a glass rod through the fluid. If strychnia be present, a violet colour of considerable beauty will be almost immediately produced, which, after a few minutes will fade into a reddish-yellow, but may be renewed by the addition of more bichromate so long as any strychnia remains undestroyed in the mixture. In this way 1-1000th of a grain of that alkaloid may be made to yield a very decisive indication. The points to be noticed are, that sulphuric acid alone produces no apparent effect, and that the action begins at once around each particle of the bichromate, so that if the glass be held in a verticle position, streams of a violet-coloured fluid may be seen to flow from each particle; and if, at this time, the whole be slowly stirred, the entire bulk of the fluid will speedily assume the same characteristic tint.—*Pharmaceutical Journal*.

MR. GILBERT'S FULCRUM.

To the Editor of the *Provincial Medical and Surgical Journal*.

SIR,—In your last number of the *Provincial Medical and Surgical Journal* you reviewed my pamphlet on the *Extraction of Teeth, with an Account of a New and much less Painful mode of Operating*, but for the following reasons could not recommend it to your readers; had you, however, inspected the fulcrum and chair yourself, or sent some competent person, as did the editors of the other medical and surgical journals of repute, before offering to criticise, I am sure you would have given the same favourable verdict. Allow me, therefore, in justice to myself as the inventor, and the profession and public you have unintentionally misled, to refute your objection. You state:—

"To any one who understands the commonest laws

of mechanics, it will be at once apparent, that in raising a lower tooth, for instance, out of the socket, as proposed, the jaw is forcibly pressed against the under side of the fulcrum, and the amount of injurious pressure is just as great as it would be if the fulcrum were loose in the mouth, as in the old pelican elevator. Indeed we are inclined to think that the injury may be greater, since in Mr. Gilbert's fulcrum, no adaptation can take place to the surface of the teeth, but some one point must receive all the pressure required, whilst the fulcrum afforded by the pelican, adjusts itself so as to take its bearing from all the available points, and is consequently not so likely to prove injurious, either by damaging the crowns, or producing inflammation of the sockets.

"We are decidedly of opinion that in the majority of cases the sound adjacent teeth are exposed to injury from the pressure of *any fulcrum, which can be used against a power sufficient to raise the tooth out of the socket*, for it is quite evident that if you lift the tooth the jaw either goes with it, or is prevented doing so by some antagonistic force, and as that force cannot be applied to the soft parts, its application is limited to the teeth themselves as in both the instrument of Mr. Gilbert and the discarded elevator.

"Should these opinions be practically falsified, no one will rejoice more than ourselves, but after very mature consideration of the subject, we cannot conscientiously recommend the apparatus to our readers, although we are fully sensible of the great advantage of the principle, if it could be satisfactorily carried out."

Now, I contend that the principle is carried out by my fulcrum, and that your objection falls to the ground; for the teeth do not come to any injurious contact with the fulcrum, for the following reasons, which you have entirely overlooked or forgotten:—In extracting a tooth with the forceps with one hand, you place the other on the chin to counteract the antagonistic force, assisted also by the patient's own weight and muscular resistance (if the lower jaw is to be operated upon, as exemplified by you.) No injurious consequences have ever happened. Should the teeth come in contact with the fulcrum, which being covered with some soft material, as gutta-percha, no one tooth is particularly pressed upon, as hundreds can testify, on whom I have operated. Many were eminent surgeons, artists, dentists, and mechanics, and all are satisfied of the great superiority of my invention. Should you require further evidence, I send the address of a gentleman from whom I extracted a large upper molar, wearing at the same time upper artificial porcelain teeth, which would have broken like glass had they come in forcible contact with the fulcrum. I know anything new has many difficulties to contend with, but I trust my great practical experience—moreover, the fact of eminent dentists sending me some of their most difficult cases of extraction, and the testimony of those who daily use my fulcrum and chair, to the exclusion of the old method, must be a further guarantee of the value of the invention.

When exhibiting and explaining the use of my fulcrum, at the meeting of the South-Eastern Branch of our Provincial Medical and Surgical Association, at Brighton, of which I am a member, not an objection

was raised, but by all praised, as did the members of the Medico-Chirurgical Society, Westminster Medical, Medico-Botanical, &c. &c.

Should you have any further doubt on the subject. against such evidence, and against such high medical and surgical authorities as the *Lancet*, *Medical Times*, &c. &c., do come and have a tooth extracted, when I am sure you will go away and exclaim with Mr. Punch,—"Go to the admirable Mr. Gilbert, in Suffolk Place, who is dragged into this essay for the benefit of mankind alone, and who I vow removes a grinder with so little pain, that all the world should be made aware of him."*

I am, Sir,

Your obedient servant,

H. GILBERT.

5, Suffolk Place, Pall Mall, East, London,

September 28th, 1849.

[We willingly give insertion to the above letter, although we have no inclination to risk the destruction of a valuable tooth for the sake of proving the truth of our opinion. We beg, however, to remind Mr. Gilbert, that it was only on his repeated solicitation that we reviewed his pamphlet, thinking the notice in the report of the South-Eastern Branch quite sufficient for the purpose of bringing his invention before the public. We would also remark that the Editor of a journal is not to be led by the opinions expressed by his contemporaries, but rather to judge for himself, which we have endeavoured to do in this instance. With regard to Mr. Gilbert's reasons for disputing the position maintained in our review, we regret extremely, that they have not altered the opinion formerly expressed. If the force of the hand on the chin could be sufficient to antagonize the power exerted by the forceps with the assistance of the leverage afforded by the fulcrum, then the use of the instrument cannot be great in raising the tooth perpendicularly from the socket; for we cannot suppose the left hand stronger than the right. The fulcrum, therefore, we think, if of any use, must be strongly depressed, or rather, the jaw must be elevated with great power, and if so, the danger of injury to the sound teeth proportionably increased; and this we hold to be the most important point to guard against in the whole range of dental surgery.—Ed. J.]

NAVAL ASSISTANT SURGEONS.

To the Editors of the Provincial Medical and Surgical Journal.

SIRS,—From one of your leading articles in the last number of the *Journal*, it is so far gratifying to see that you are deeply interested in the anomalous position in which the Assistant Surgeons of the Navy are placed, and that your zeal in their cause has urged you to make a very warm appeal to the members of the Association in their favour. Their situation in general, on board Her Majesty's ships, is certainly not such as comports with their official rank in the service, and their relative standing with their brethren in the Army, as to the very

important privileges of separate cabins and messing in the ward-room; and that they have not that accommodation for reading, writing, and study, which are so essential to the progressive life and usefulness of a professional man, but are exposed to much distraction and personal disturbance, "*quorum pars fui*," so that the case of this class of officers becomes a very legitimate object for sympathy and amelioration. It may be alleged, however, by those who uphold the present state of things, or on the scale of technical justice, that the whole body of assistant-surgeons have voluntarily and desirably on their part, entered the service, with a full knowledge of all the privileges and accommodation belonging to their class in the navy, and that no faith has been broken with them on the part of the Admiralty or other head of the service, and, therefore, the grievance may be said to be self inflicted. Still the anomaly of the possession of rank without its appropriate privileges and immunities remains, though it affects not only them, but also that numerous body of officers, the mates, who also rank with ensigns and lieutenants in the army, and yet must work it out in the cockpit and at the midshipmen's mess. The similar privations which these latter officers suffer in correspondence with their similar rank, may be said to be no valid reason why the assistant-surgeons, as a scientific class, should not irrespectively have the full privileges of their rank, in the way of ship accommodations, granted them, and it is surmised, from some acquaintance with the subject, that if a separate cabin and servant were allowed them, for privacy and study, that many of them would not be ambitious to join the more expensive mess of the ward-room, and assuredly the sick and hurt in the service would thereby receive no detriment.

The acquisition of this accommodation and even the full privileges, nominally but not actually, attached to the rank of an assistant-surgeon, is, I am persuaded, the earnest wish of the surgeons in the service; and the director of the medical department has more than shown how desirous he is that the position of the assistants should be improved in all that relates to their privileges, comfort, and usefulness. There is, therefore, every hope, that with time and a temperate and sustained appeal to the Admiralty, the desirable boon, if not the implied right, will be granted.

With the view that these ameliorating objects will be thus obtained, it does not appear how any hasty interference on the part of members of the profession, either individually or collectively, as the Association, when they have no direct interest in the matter, will at all accelerate or render the object of their wishes more perfect when it is granted; and above all, every intemperate reclamation will not only tend to postpone the hour of relief, if not of justice, and throw an unfavourable aspect upon the claims which have recourse to such advocacy. Impressed with these sentiments, it gives me satisfaction to see that the Central Council has not hastily nor prematurely acted upon a requisition made to them, since the last general meeting, by Dr. Brown, to induce the Association to use its interest and corporate expression in favour of the claims of the naval assistant-surgeons. How Dr. Brown was encouraged or influenced as a private gentleman (for it appears his requisition was not made in the name or by the sanction of any professional body,) to submit such

* See *Punch*, June 16th, p. 2.

an important subject of the public service, for the interference of the Association, is not shown. It could not have been from personal grievances: for if he had been in the service, his day of suffering discomfort and abatement of the privileges of rank was over; sympathy, however, for his deserted brethren may have been the propelling motive for his zeal and conduct, and so far was commendable.

In concluding this subject, give me leave, with much deference, to appeal to you, whether in your statement of the matter, you have not allowed your disinterested sympathy to urge you to use expressions perhaps a little too strong, when you state "*the mental degradation*" to which Naval Assistant-Surgeons are exposed, "*in many instances, goes on till the unhappy sufferer has terminated his existence by suicide, or has, perhaps, ended his days in a madhouse.*" This picture, however horrible, may calmly be met by the challenge to state *the many*, or even the few instances, beyond a solitary one, in which Naval Assistant-Surgeons have inflicted self-murder, in consequence of the privations suffered from the want of ward-room accommodations; and as to the "*perhaps*" becoming lunatics, it may with much plausibility be replied, that the same *adverb* might be placed before any other contingency of life, criminal or otherwise.

Even if the whole annoying circumstances of a cockpit or a gun-room life lead to *mental degradation* in a weak, slavish, or very sensitive mind, any of the above melancholy alternatives is not a natural nor a necessary consequence, for the sufferer has it in his power, by the resignation of his commission, to emancipate himself, as you observe, from the degrading influences and discomforts in which the man has voluntarily placed himself, or which, contrary to his expectation, may have actually surrounded him. Her Majesty's navy is no convict establishment: resignation, not desertion, is the rule of quittance.

Giving all credit for the *difficulty you conceive*, how a medical man, with any self-respect, can enter the service, as assistant surgeon, under the present state of things, I am sorry I cannot join you in that deeper feeling regarding him who engages in the service, when you say you "*can only pity the individual for the absence of that self-esteem which ought to inspire every man who practises a liberal profession,*" for if I did, I am afraid I should be doing some disparagement to the memories of a Blane, a Trotter, and a Johnson, and to the living names of Drs. Forbes and Robertson, and to those of Sir James Clark and of Sir John Richardson, all of whom began their professional career "*with their eyes open to the degradation they had to incur;*" and I need not say of them that are living emancipists, that their eyes are still open to the great, useful, and eminent duties of their several distinguished stations.

Time, and the refinements of education and manners, make great changes in relative conditions of life, and though the assistant-surgeons now, in many ships, sit down with the fellow-messmates at a table, which for material, and the richness and elegance of equipage, was seldom surpassed in the ward-rooms of former days, or even in the gun-rooms of small vessels at the present time; still, after all, it is but just, necessary, and very desirable, that assistant-surgeons should have at least

a separate cabin on board ship, and which, it is to be trusted, will, in no long time, be granted them.

That they may soon obtain this and the other full privileges corresponding to their rank and usefulness, is the very earnest desire of,

Sirs, yours respectfully,

A MEMBER OF THE ASSOCIATION,
AND SURGEON R.N.

September 24, 1849.

[We refer our correspondent to the pages of the *Times* and other periodicals, for numerous instances recorded, and to a recent number of the *Lancet*, in which the following sentence on the subject in question occurs in a letter, signed M.D.:—"Several suicides have sealed the truth of this statement with their blood, and this kind of witness, it is to be feared, may rapidly increase under the system employed at the present time." It is no disparagement to the distinguished gentlemen above mentioned, that they have gone through the ordeal unscathed, but it is certainly no argument in favour of the present practice. Extraordinary talent will break through all trammels; but in legislating for a class, we expect to find the *ordinary* attributes of humanity, and consequently, must deal with them accordingly. We cannot therefore agree with our very courteous correspondent in thinking the language too strong, unless untrue. If untrue, the onus lies with those originally publishing the false statements, not with ourselves.—ED. J.]

MEDICAL BENEVOLENT FUND.

To the Editor of the *Provincial Medical and Surgical Journal*.

MR. EDITOR,—At page 548 of your last publication, there occurs a paragraph containing a statement so erroneous in fact, as well as so fallacious in principle, that I am surprised it should have escaped the notice of your editorial vigilance, and I must particularly request that you will insert the following explanation in your next number:—

The passage in question runs thus:—"The subject of the fund for the temporary relief of medical men, in cases of sickness or poverty, of which Mr. Newnham, of Farnham, Kent, is the founder; and another fund for giving annuities to the widows and orphans (?) of medical men, got up by Mr. Daniell, of Newport Pagnell, were introduced and discussed. It was considered by the meeting that the amalgamation of the two would be highly beneficial."

With regard, first, to the errors in this statement, I would mention,—

I. That my residence is not at Farnham, in *Kent*, but simply *Farnham*, the only post town of that name in the kingdom; or, if the county must be named, it is *Surrey*. This correction is not unimportant, because post-office orders taken out for the former, will not be paid at the latter place, and thus confusion and trouble will be produced.

II. I am not the *founder* of the Institution. The Benevolent Fund acknowledges *no individual* as its

founder. The idea of this Fund originated, I believe, with Dr. Baron, but its merits and provisions were freely and fully discussed by the Council of the Association, before it was established, at a general anniversary meeting of the Association in 1836, from which time it has been incorporated with it, and has become an integral and essential portion of that Association; and I must be permitted to add, that *every member of the Association is morally bound to uphold its interests, and to promote its welfare according to his individual ability. It is not a question of choice, but a question of right and wrong, and it is the duty of every member in his measure to contribute to its funds.*

One word with regard to myself. The Benevolent Fund was incorporated with the Association in 1836, at which time I was not one of its members; I became such in 1840, and from that year I became a warm and consistent supporter of all its designs. After a few years I was regularly appointed a trustee of the Benevolent Fund, in conjunction with Dr. Baron and Dr. Hastings, and on the retirement of Dr. Conolly, in 1846, from the office of Treasurer and Secretary, on account of ill health, I was solicited to fill the vacant offices; on accepting those offices, I pledged myself to devote my best energies to promote the success of the Fund, the care of whose pecuniary interests was thus delegated to me. How far I have redeemed that pledge, it is for the members of the Association to judge; but I do wish it to be clearly understood, that when I urge the claims of the Fund upon others, it is *not as an individual, but in execution of a trust reposed in me by the Association, in obedience to the laws of that Association, and with the sanction of its authority.*

III. Little need be said about Mr. Daniell's Fund, except that this Fund did originate with that very meritorious individual; and that the question of its adoption was brought before the Association at its anniversary meeting at Norwich, in 1845, and that it was *unanimously resolved that it could not be recognized.* However much, therefore, as individuals, we may be disposed to support the Annuity Fund, it is a question which ought not to be entertained at our branch meetings, because it cannot form a part of the business of the Association, and has no connection with it.

IV. But this paragraph is *fallacious in principle.* I am not about to discuss the merits of Mr. Daniell's Annuity Fund; the principle is undoubtedly a good one; each individual who possesses the means may avail himself of its resources, in order to secure for himself or his widow an annuity to commence under given circumstances; and if those circumstances have been well considered,—and the value of professional life has been duly estimated,—and abundant provision has been made for all probable contingencies,—and a due equalizing payment has been apportioned for the difference of age,—and a proper estimate of the risk upon marriage,—and the reception of the annuity has been made certain, not contingent, then is it a valuable *provident or mutual annuity fund*; but in no respect does it partake of the nature of a *simply charitable or benevolent fund.*

How, then, can the two be amalgamated? The one is a provident fund; the other is a benevolent fund. The one is intended for those who, to a certain extent,

can provide for themselves; the other is expressly for those who have been unable to make this provision, or who, having once made it, have been compelled by adverse circumstances to drop their subscription. The one is intended to meet in prospect the occurrence of certain evils; the other to remedy those evils, as far as may be, which exist *unrelieved and unrelievable, except by the pure hand of charity.*

It is not to be forgotten that the Benevolent Fund has not lost sight of the importance of annuities; on the contrary, as soon as the *Donation Fund* shall have accumulated £2000, which we hope to accomplish this year, so soon will the Association commence granting annuities, under proper circumstances.

In conclusion then, Mr. Editor, let me assume that it has been proved that the *amalgamation* of two funds upon diametrically opposite principles cannot possibly take place. Let me exhort those who are able to provide for themselves to do so in the way best suited to their finances and their judgment; let me advise those who prefer the relief by *annuity* to the relief of present and unspeakable distress, to contribute largely to our donation fund; and finally, let me urge upon every member of the Association the performance of his unquestioned duty of contributing according to his means, either by donation or subscription, and uphold the resources of that fund which alone can relieve the misery—the wretchedness—the destitution—the starvation—of those brethren whose cries are only stifled by the proud consciousness of the independence which they once possessed.

I remain, Mr. Editor,

Yours faithfully,

W. NEWNHAM, Treasurer.

[The passage referred to by Mr. Newnham was forwarded to us by the Secretary of the Branch exactly as published, and we did not consider ourselves called upon to make the corrections considered necessary by that gentleman, excepting, of course, the mistake of the county, which escaped our notice. It is not to be supposed that every member of the profession not hitherto belonging to our Association, can be aware of the history of the Benevolent Fund; but it is so completely identified with Mr. Newnham, that we cannot wonder at his being considered its founder. We entirely agree with him in his opinions and views of the whole matter, and trust that his exertions—aided as they deserve—will soon raise the donation fund to the amount required to bring it into action.—ED. J.]

MR. BRITTAN'S DISCOVERIES.

To the Editor of the Provincial Medical and Surgical Journal.

MR. EDITOR,—You are doubtless cognizant of a letter addressed in zealous eagerness to the London journals, by Dr. Budd, on the supposed cause of cholera; and are probably about favouring your readers with some more pictorial and elaborate exposition of this most marvellous microscopical discovery, by which the hitherto-unsolved problem is cleared up by the Achromatic lenses of a Powell or a Ross.

Now, really, Mr. Editor, with all respect for the talents and intentions of Dr. Budd, and with a fair appreciation of the value of scientific inquiries, I am among those who grieve at the flood of pseudo-science which is deluging our medical literature, and at the superficial haste of men from whom we might justly expect better things!

We all recollect the gaping astonishment in the world of science, (a world often manifesting gross credulity and shallow mindedness) at Mr. Cross's galvanic creation of animalculæ, with the thousand-and-one eager suggestions founded upon so egregious a fallacy! and we have a still more modern instance of scientific extravagance and folly, in the microscopically revealed origin of the late potato epidemic! while, now, we are excited anew by the penetrating sagacity of the same all-detecting power, and instead of *an insect*, it is a freshly-imported *fungus* which, unhappily, is only satisfied with the soft couch of the mucous membrane of the intestines of Her Majesty's liege subjects for a domicile, (*non dura ilia*), which it no sooner enters, than revolution of the corporeal commonwealth, in its direst form results; and out of which it no sooner makes its exit than with railroad speed and vulpine voracity, it seeks another dwelling place, and there repeats and re-repeats its devastations!

Here then our minute and fatal foe is detected in the very act, and we must now go forth with our chemically-charged batteries, and poison that which poisons us, by all imaginable ways and means.

Such the discovery. Such the antidote! But we must confess, that the statements and experiments of both Mr. Brittan and Dr. Budd, appear very far in the rear of their conclusions: and even admitting perfect correctness of fact, we are unable to detect the most distant probability in the inferences.

The discovery of this fungoid stranger, we should say, is simply curious, and quite consistent with the laws of parasitic life; and that its existence should be limited to districts where influences unfavourable to the health of higher organisms are prevalent, is only consonant with the known facts attending the decomposition of animal and vegetable matter.

The fungus is surely as much the expression of the morbid condition, be it what it may, as the cholera itself, but to raise it to the dignity of a proximate cause of a disease presenting the history and symptoms of the present epidemic, (an idea admirably fitted for popular apprehension,) we can only regard in the light of a scientific farce, and as a striking instance of crude generalization.

In conclusion, we can only express our conviction, Mr. Editor, that when the fever of imagined novelty has somewhat subsided, Dr. Budd will himself admit the justice of our criticisms, and confess that he that maketh haste to be a discoverer, is not wise.

I remain, Sir,

Your obedient servant,

SCRUTATOR.

Sept. 29, 1849.

TREATMENT OF A POOR-LAW MEDICAL OFFICER BY THE EVESHAM BOARD OF GUARDIANS.

To the Editors of the Provincial Medical and Surgical Journal.

GENTLEMEN,—I will thank you to insert the following narration in an early number of the *Journal*.

I am, Gentlemen,

Yours respectfully,

ANTHONY MARTIN.

Evesham, Sept. 29, 1849.

I am one of the surgeons to the Evesham Union, and on the 19th of July last an order was left at my house to attend upon James Williams. I did not do so, on the ground that he was able to attend at my surgery; he never made any other application for medical aid, but on the 6th of August a neighbour, whom I accidentally met, told me that he was taken much worse, and asked me to visit him, which I did in less than an hour. I found him very ill, and on the 10th of August he died. The coroner was informed of the circumstance and deemed it his duty to hold an inquest on the body, which I attended. The jury agreed to the verdict of "Died from natural causes," but they imputed great blame to the medical officer, because he did not visit the deceased on the reception of the order. I contended that where paupers were able to attend on the surgeon, it was no part of his duty to visit, and I proved that the deceased was able to do so by the relieving officer of the district, who saw him out fishing several times after he granted the order; by his son-in-law, who said he was quite able to go out; and by one of the jurors, who stated that he was many times in his house for beer. It is easily to be conceived that the case made some talk, and at the next meeting of the Board it was determined to investigate the case, and I was summoned to attend upon them on the 10th of September.

Conceiving it probable that I might have some trouble with them, I took the precaution of obtaining the opinion of the Poor-Law Board on the subject, by sending to them the following letter:—

To the Poor-Law Board.

MY LORD AND GENTLEMEN,—I would be much obliged to you if you would be so good as to give me information on the following point:—The duties of a District Medical Officer are comprised in Article 206, and in Division No. 1 he is required "To attend duly and punctually upon all poor persons, &c." Does the word "attend" here mean that the medical officer is to visit at their own homes all cases for which he receives a medical order, or only such to whom it would be injurious to attend at the surgeon's residence? And is it to be understood that pauper patients who are able to do so, are to attend upon the surgeon for medical aid?

I am, my Lord and Gentlemen,

Your obedient servant,

ANTHONY MARTIN.

Evesham, Aug. 28, 1849.

The following is the reply which I received :—

To *Anthony Martin, Esq., Evesham.*

Poor-Law Board, Somerset House,
6th Sept., 1849.

SIR,—I am directed by the Poor Law Board to acknowledge the receipt of your letter of the 28th ult., and, in reply to the enquiry therein contained as to the duties of a district medical officer in a Poor Law Union, I am to inform you that a medical officer is bound by the regulations, if necessary, to visit his patients at their own homes, and if serious inconvenience would be caused to any pauper by his coming to the medical officer, the visits should be so made. The Board consider that to prohibit any attendance, except at the patients' homes, would be unreasonable and unnecessary; but if the medical officer refuse or neglect to visit, he must be prepared to shew that he was justified in the particular case.

I am, Sir,

Your obedient Servant,

_____*
Assistant Sec.

I think that in my communication the question in dispute is fairly met; and though the reply is not so explicit as could be wished, I think it justifies the position that I took at the inquest, that Poor-Law medical officers are not called upon to visit those who can attend for themselves. I also procured the opinion of some twenty of my professional brethren, who are, or have been, union surgeons, every one of whom agrees with me in the principle, and are daily confirming it in their practice. On the day appointed I attended the Board, feeling confident that my case was strong, and that I should be vindicated from the aspersion that the jury sought to cast upon me. But no such thing. The board expressed an unanimous opinion that I was guilty of culpable neglect, and that it is the duty of every medical officer to visit all paupers for whom an order has been granted, and they agreed to the following resolutions :—

EVESHAM UNION.

Extract from Minutes of 10th September, 1849.

The board are unanimously of opinion that it is the duty of all district medical officers *personally to see and examine, without delay*, all poor persons requiring medical attendance within the district assigned to them, upon the receipt of a written or printed order to that effect, according to article 206 of the order of the Poor-Law Board, Dated the 24th July, 1847.

And in reference to the case of James Williams, the board are of opinion that Mr. Martin has acted contrary to article 206 of the Poor-Law Board, inasmuch as by his own admission he received an order to attend the said James Williams, on the 19th of July, but took no steps to ascertain the state of his health till again requested to do so, on the 6th of August, only three days prior to his death. The conclusion therefore come to by the Board is, that there has in this case been culpable neglect on the part of Mr. Martin.

J. B. SAUNDERS, Clerk.

(A true copy.)

* The name is illegible.

It is a matter of regret that the first resolution is rather vaguely drawn up; the words "see and examine" ought to have been rendered "visit," because this was the word used in their argument with me, and in connection with the second resolution; it is the only interpretation that the phrase will bear, for I contended that it did not devolve upon me to take "steps to ascertain the state of his health," so long as he was able to come to me. In conclusion, I would observe, that of all decisions ever arrived at, even by a Board of Guardians, this appears to me the most irrational and arbitrary; they are requiring for the poor what many of them do not want for themselves; they are asserting a principle which is contrary to the universal practice in the Poor-Law Medical Department; they are going in opposition to the requirement of all the dispensaries and clubs that I ever heard of, and I believe that it is also in opposition to the regulations of the Poor-Law Board. Sure I am that it will not be obeyed till it is enacted by an authority much higher than any single Board of Guardians can claim; and if evidence were wanting, it furnishes one other proof of the utter incompetency of those in authority to form an opinion as to what is demanded for the proper administration of Poor-Law medical relief.

MICROSCOPICAL DISCOVERIES IN CHOLERA.

To the Editor of the *Provincial Medical and Surgical Journal.*

MR. EDITOR,—I have more than once had to point out mistakes in regard to the relation supposed to be borne by the fungous hypothesis of cholera, (first, I believe, propounded in my "Disquisition, &c.," published February 1st, 1848,) to other theories previously and subsequently promulgated.

Soon after my book was published, a gentleman said to a professional friend of mine,—“Oh, this is the same hypothesis as put forth by Dr. Holland;” and in your last number, in the account of the Bath and Bristol Branch Meeting, Dr. Symonds is made to say—“Dr. Holland had suggested this (fungous) theory in his well-known paper, &c.” That paper, it is “well known,” was written to point out a relation between the diffusion of cholera and “the migration of insect swarms.”

Now, I cannot better attempt to set these gentlemen right, than by transcribing from a letter, addressed to me by Dr. Holland, on the 14th February, 1848, Dr. Holland's own impression of the relation of my hypothesis to his :—“I ought earlier to have thanked you for your kindness in sending me your ‘Treatise on the Cholera,’ which I have read with the interest belonging to a *new view*, very ingeniously maintained, on a subject of singular difficulty and obscurity.” And then Dr. Holland proceeds to contrast with my view the greater probability of his own, a very unnecessary proceeding to say the best, had he thought the two views identical.

I may as well, while on this subject, correct another mistake. In an editorial article of the *Medical Gazette*, (Sept. 28th,) in which my recent observation of organ-

ised bodies in the sweat of cholera patients is inadvertently said to have proved the basis of my hypothesis of the "Fungous origin of Cholera," but that hypothesis, purely speculative, was published in February, 1848, and my first microscopic examination was not made till September, 1849. I was not at all aware of Professor Mitchell's speculations till, through his courtesy, I was furnished with a copy of his book on the "Cryptogamic Origin of Fevers," published early in 1849; nor have I ever seen the speculations of Henle or others, said to bear a resemblance to mine. If I cannot claim priority, I can honestly claim originality for my views.

I remain, Mr. Editor,

Your faithful servant,

CHARLES COWDELL, M.B.,

Physician to the Dorset County Hospital.

Dorchester, Oct. 6, 1849.

CREOSOTE EMPLOYED TO REMOVE THE TASTE OF COD-LIVER OIL.

To the Editor of the Provincial Medical and Surgical Journal.

SIR,—Allow me through your columns to draw attention to what I have found a valuable therapeutical combination in the administration of cod-liver oil, which is at present attracting so much notice.

In a large number of cases of consumption in which I have used it during the last six months, I have found considerable difficulty in obviating the sickness which in many cases follows its administration. After trying in vain the essential oils, &c., I at last prescribed one drop of creosote in each dose of half an ounce of this oil; they mingle intimately, and I have much satisfaction in stating that it has succeeded in every instance (with one exception) in preventing even any nausea being felt by my patients, who liken the taste to that of red-herrings.

Allow me to add that I hope to send to Dr. Ranking a report of all my cases, so soon as a sufficient time has elapsed to render such available for any useful purpose.

I am, Sir,

Your obedient Servant,

JOHN BARCLAY, M.D., M.R.C.P.

Leicester, Sept. 28, 1849,

Medical Intelligence.

HOMOEOPATHY AND CHOLERA.

We have long been aware that our infinitesimal friends were in the habit of giving allopathic doses under the guise of homoeopathic globules, but we did not think they were so heroic in their practice as appears from the following extract:—

Since the appearance of cholera in this city, (New York) our homoeopathic friends have laudably endeavoured to do their part in enlightening the community in regard to its prevention and cure. Hence we have had through the daily papers, various private and official

documents on the subject. We have for some time been aware, that in this country at least, true homoeopathy no longer existed except in name; but we were not quite prepared for so frank an acknowledgement of the fact as has been made in the documents referred to. Thus we are told in the communication from the committee appointed by the "Homoeopathic Physicians' Society of New York," that the proper remedies for cholera are *Cuprum Metallicum* or *Veratrum* in the first stage, and if the patient becomes bad the *Spirits of Camphor* must be resorted to. Yes, the veritable "*Spirits of Camphor*," not the 30th dilution, nor the 61st trituration, but *spirits* of camphor, and that in doses of three drops repeated every few minutes if the symptoms are urgent. The committee making this report is composed of six or eight of the most prominent homoeopaths of this city. Their names may be found in the daily New York *Tribune* for the 5th instant. Notwithstanding the boasted certainty and specific nature of homoeopathic remedies, there seems still to be some differences of opinion in regard to the true homoeopathic remedy for the cholera. Hence, in the *Tribune* for June 8th, we find a communication from Charles J. Hempel, who, though a member of the New York Homoeopathic Physicians' Society, yet takes the liberty to differ from the report of the said committee. He regards the cuprum, the veratrum, and the camphor, only as palliatives, while the *aconitum napellus* furnishes the only true cholera specific. The following are his directions for its use, viz.:—

"As soon as the diarrhoea sets in, with or without cramps in the stomach and bowels, with or without vomiting, coldness of the extremities, &c., dissolve five drops of the *Tincture of Aconite* in ten tablespoonfuls of clear croton water, and take two teaspoonfuls every half-hour, until an improvement sets in; then continue every two hours until you feel entirely well. Eat very little, and only light food, gruels, weak tea and toast, &c.

"If the diarrhoea should be very bad, attended with or without cramps in the bowels, spasms in the extremities, vomiting, or if the paroxysms should set in immediately with great force, dissolve ten drops of the tincture of *Aconite* in ten tablespoonfuls of water, and give the patient two teaspoonfuls every five minutes until the pulse improves, the extremities become warm, and a moisture is perceived on the skin; then continue every twenty minutes until the improvement is strikingly manifest, and finally continue every two hours until the patient is entirely recovered."

There it is, real, genuine, *Tincture of Aconite*, in doses, amounting to nearly one drop every five minutes, or ten drops every hour. There is no dilution, no trituration about it; for he tells us that he uses the tincture prepared after Pereira's formula. And in regard to the dose, it should certainly satisfy any allopath in the country. Pereira himself directs only five drops three times a day.

If we had been desirous of proposing a plan of treatment diametrically opposed to the so-called principles of homoeopathy in every particular, we could not have accomplished our object better than by adopting the course here recommended by the first homoeopaths in this city. Is there the remotest possible similarity between the symptoms induced by camphor, and those

of cholera? Is there even an *approximation*, between three drop doses of Spirits of Camphor, or one drop doses of Tincture of Aconite, *every five minutes*, and the smelling, or even taking of a *pellet* of the 30th dilution of either? Alas! for the doctrines of *attenuation* and *Similia Similibus*. Well may our friend Kirby, of the *American Journal of Homœopathy*, exclaim that, a mongrel in medicine, of all men is the most inconsistent."

BENEVOLENT FUND.

We have much pleasure in recording a donation of £5. 5s. to the Benevolent Fund, from Dr. Jeaffreson, of Finsbury Square, London, through the hands of Dr. Kirkman, of Melton, President-Elect of the Suffolk Branch.

SALE OF POISONS.

The Pharmaceutical Society were last Thursday evening engaged on the consideration of measures which ought to be taken by the Legislature to prevent the wilful and accidental poisoning, especially by arsenic, now so deplorably frequent. Dr. Tunstall, of Bath, and Dr. Sibson, were present, as representatives of a committee appointed by the Provincial Medical and Surgical Association to confer with the Pharmaceutical Society on the subject. It was proposed, and we presume will be determined, that a joint committee from the two bodies will be appointed to take the matter in hand.

APPOINTMENTS.

BATH GENERAL HOSPITAL.—The vacancy in the office of Physician to the Bath General Hospital, occasioned by the decease of Dr. Tarleton, has been filled by the appointment of Dr. Lindoe, one of the Physicians to the Eastern Dispensary, of Bath.

His Royal Highness Prince Albert has been pleased to appoint Edwin Saunders, Esq., of George Street, Hanover Square, to be Surgeon-Dentist in Ordinary, in the room of Mr. Nasmyth, deceased.

Dr. Benjamin Alcock has been appointed Professor of Anatomy in Queen's College, Cork, *vice* Dr. Carte, who has retired, in consequence of ill-health.

THE BRISTOL MICROSCOPICAL INVESTIGATIONS IN CHOLERA.

We have great pleasure in announcing that we hope, in the next number of this Journal, to publish the report of the Committee appointed by the Bristol Medico-Chirurgical Society to investigate the subject of cholera, with the aid of the microscope. In this report the whole of the recent observations of Messrs. Brittan and Swayne, with those of Dr. Budd, will be embodied.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, October 5th, 1849:—John Straw Armstrong, Belfast; William

Cowen, Stokestown, co. Roscommon; Henry Tregelles Fox, Dunmow, Essex; George John Hennell, Tamworth; Richard Skinner Henning, East Brent, Somersetshire; Charles Nathaniel M'Caull, Dublin; John King Maconchy, Dublin; James Denholm Pridie, Stockton-on-Tees, Durham; William Henry Tinney, Ottery St. Mary, Devon; John Horseley White, Wolverhampton, Staffordshire; Henry Merrill Williamson, Chapel en le Frith, Derbyshire.

PRIZES.

The Jacksonian Prize subject for the year 1850, annually awarded by the Royal College of Surgeons, is "Neuralgia; its various Forms, Pathology, and Treatment." The amount of the prize is twenty guineas. The subject of the Triennial Prize of fifty guineas is, "The Functions of the several Parts of the Large Intestines in Animals of the Class Mammalia."

SOCIETY OF APOTHECARIES.

Gentlemen admitted Members on Thursday, September 27th, 1849:—Edmund Carver, Melbourn, Cambridgeshire; Edward Emra Earle, Bristol; John Warren Edger, Kirkby Stephen; George Gibson, Birtley, near Gateshead; George Wm. New; Thos. John Sayer, Kenninghall.

Gentlemen admitted Members on Thursday, October 4th, 1849:—John Anderson, London; Robt. Hamilton, Ipswich; George Paton, Wetherby; Joseph Skelding, Bridgnorth; Clement Madely Smith, Horncastle; William Robert Stewart, London.

OBITUARY.

September 29th, at Eastbourne, Sussex, Dr. Allen Williams, aged 32.

October 3rd, at his house, No. 5, Carlton Terrace, Brixton, Surrey, after a very short illness, James Crawford Ferrier, Esq., M.D., in his 41st year. The deceased gentlemen was a member of the Association.

October 6th, at Brighton, John Taylor Warren, Esq., Inspector of Military Hospitals, much esteemed and lamented, aged 78.

At the residence of Mr. Edge, surgeon, Salford, after seven hours' illness, John Williams, Esq., M.R.C.S. and L.A.S.

ERRATA.

At page 538, col. 1, line 18, for "deglution" read "deglutition."

At page 538, col. 2, line 23, for "an immense coagulum of fluid blood" read "an immense coagulum of florid blood."

At page 479, col. 1, line 14 from the bottom, for "chops" read "slops."

TO CORRESPONDENTS.

Communications have been received from Mr. Denton, Mr. B. Travers, jun., Dr. Mackness, Mr. Bird, Mr. Markwick, and Dr. Norris.

It is requested that all letters and communications be sent to J. H. Walsh, Esq., Foregate Street, Worcester. Parcels and books for review may be addressed to the care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL

MEDICAL & SURGICAL JOURNAL.

OBSERVATIONS UPON

INJURIES OF THE HEAD.

By BENJAMIN TRAVERS, JUN., Esq.,

Fellow of the Royal College of Surgeons; lately Resident Assistant Surgeon
and Lecturer on Surgery at St. Thomas's Hospital, &c. &c.

INTRODUCTORY REMARKS, DEFINITION OF TERMS,
AND PROPOSED CLASSIFICATION OF THE FORMS OF
INJURY.

The several points of management in the accidents to which the brain and its investments are exposed, are now so generally understood, that it would appear to a superficial observer as if no more remained to be said on the subject. They have claimed the attentive inquiry of some of the ablest surgeons of past and present times, and in the main have been well elucidated and clearly explained. Nevertheless, there yet remains something to be done; if we are rich in materials there is a want of systematic analysis in reference to the treatment of these injuries, without which it is impossible to generalize with safety or success.

The profession in this country have long been distinguished by a cautious observation of facts, and the difficulty of finding out the truth has led them to place a correct value upon its ultimate attainment. Hence they are as a body safer practitioners than many of their Continental neighbours, and I regard the management of head injury as forming no exception to this rule. Perhaps, too, we appreciate more justly the purpose and operation of medicines; certain agents, as mercury, are administered with greater boldness and effect, and I am inclined to think that a mischievous habit of anticipating the approach of possible symptoms or forms of diseased action, whether by mechanical interference or otherwise, is not at present to be numbered amongst the short comings of British surgery.

In certain treatises of a former time we read, it is true, of setting on the crown of a trephine, as a matter of course in obscure cases, or scalping the patient, as one of those mild preliminaries proper to the subsequent search for an assumed crack or fracture in the skull; but these things have passed away, and, perhaps, their mere rehearsal is uncalled for. Still the mind of a beginner is apt to be amazed and lost amidst the labyrinth of terms under which the various forms of head mischief are described, and there is an absence of simplicity even in their definition. Concussion, com-

motion, depression, compression, laceration, extravasation, are several words which, to a student, might seem to imply so many distinct species of disorder. Now, for any useful purpose of definition, they all resolve themselves into two classes or headings, viz.:—1. Commotion. 2. Compression. Surely, with a practical view, symptoms should be arranged according to their relation to the brain itself. Scalp injury belongs rather to the department of flesh wounds and their consequences.

No one who has had an opportunity of seeing much of these accidents can have failed to notice the great variety of symptoms which the same kind and amount of violence will produce in different individuals; indeed, any one who expects to realize the ordinarily-received symptoms of a concussion on all occasions will soon find himself as much perplexed as the tyro whose faith in the Hunterian definition of a venereal sore led him to reject by far the more usual forms of syphilitic ulcer, as not partaking of the essential character of the disease.

How many instances occur wherein it is not possible to know or determine, with any degree of accuracy, whether the primary condition is one of recoverable collapse or approaching death; whether the vomiting, the cold surface, the inactive pupil, the restlessness, increasing often to violent convulsion, speak only of temporarily arrested function, or denote a hopeless and helpless disorganization. Suppose, again, the first danger partially overcome; temperature restored; circulation tranquil; bowels and bladder acting healthily; still nothing rouses the patient to effectual consciousness; his best response is a groan or half-articulate sound, and he again lapses into a torpid slumber, without a sign of returning sense. Days—nay, weeks may elapse before the crisis of a protracted reaction arrives. Still it is possible that the lost balance may be restored, time alone being required, or in other words, continued rest. Slowly do the listless members resume their power, the eye its language, the mind its office, and the stomach its tone. Finally the patient may recover, waking as from deep sleep, but memory takes no heed of the past, and the progress of convalescence is nowhere better marked than in the slow revival of this faculty. Of all the accidents which occur to the brain, those followed by a slow reaction are the most interesting.

The state of torn brain is generally thought to be marked by convulsion, and I believe truly so, in fact it is an extreme instance of unsubdued irritation. Where

there is no external wound or artificial outlet, laceration, whether of surface or substance, the result of injury, is uniformly fatal. The brain never initiates an independent act of adhesion; and it does not reproduce itself. The local reaction, when death is not immediate, always induces a softened condition, and the semi-fluid debris are often smeared and infiltrated with a purulent secretion derived from the capillaries. Nature would appear altogether to decline the attempt at reconstruction, as being an effort to which she is wholly unequal. As to the instance of balls and substances which lodge, of which Hennen and others have given cases, or where portions of the brain have continued to escape for some time through an outer wound, these are not analogous examples, for there the spoiled material escapes at once, and absorption is not called for in anticipation of a process of contraction and cohesion, which has already commenced in the contiguous parts, and upon which permanent cicatrization depends.

Where there is an external wound giving a ready passage to spoiled and waste material, no appeal is needed to that roundabout process to which recourse must be had when such means of escape do not exist, and in the latter case the brain does not of itself exhibit any power to institute this essential preliminary of repair under such circumstances, viz., absorption.

Compression, whether by blood or bone, is well known to be fatal if unrelieved. Where the brain is compressed as well as torn, the characteristic marks of automatic-convulsive movements are often wanting; in other words, the organ being first completely paralysed by permanent compression, furnishes no evidence of any minor irritation. Laceration, which is one mode of irritation, is uniformly characterized by convulsion and unsustained efforts to promote and combine the manifestations of the will,—there is an imperfect volition; but when the paralysis is permanent, there is always pressure, and stertor is the sign of its direct and universal operation. In injured brain we observe two distinct effects of pressure, according to its site; it is either superficial or central. A deep-seated lesion, into which blood is poured on the instant, the result of recent injury, is directly fatal, and we may suppose that in such cases the heart's innervation is summarily subdued to extinction; but when a surface only is compressed, without breach of its tissue, the circulation becomes slow, laborious, and comparatively powerless, because the heart no longer receives or distributes its contents as heretofore. The blood moves more slowly, and there is a simultaneous deterioration of its quality. The capillary current presently finds itself impeded to downright obstruction; the tissues are gorged or circulate black blood; the flagging heart, since it cannot impart energy, derives in its turn but slight assistance from the over-loaded lungs. Death, under such circumstances, is a process of slow suffocation. The happy reverse of this picture is every now and then presented to us by the wise and dexterous surgeon, and anybody who has once witnessed the effect of raising a depressed and compressing bone, or the giving exit to a mass of coagulum lying upon a surface of brain otherwise uninjured,

will not afterwards disclaim all faith in the practical resources of surgery.

It is important to bear in mind that there are many depressed fractures which exhibit no sign of compression. The symptoms of pressure amount, in fact, to an extreme degree of that mode of disturbance which, in a more mitigated form, we term an irritation. In another place I shall speak more fully of the signs of irritation; and I could quote many cases which prove the danger of omitting to remove all possible causes of offence to the brain and its membranes after injury, wherever it is possible to do so. It will be shown, that where a fracture is depressed, it is right to raise the displaced fragment, although the signs of compression be not present, for an unsubdued irritation so caused will sooner or later terminate in an act of inflammation of one or more of the membranes of the brain, accompanied by effusion into the cavities of that organ, and a permanent change in its consistence, the result of prolonged congestion in its capillary vessels.

On the whole, I would venture to suggest that the following arrangement of head injury is, perhaps, more simple and descriptive of its several forms than any hitherto propounded for general purposes of practice and observation. All these injuries may be regarded as belonging to one of two principal divisions, which may be termed—1. Commotion. 2. Compression. Irritation and inflammation of the organ can scarcely establish a claim to a separate divisional classification. These are rather remote consequences or incidents, and grow out of the peculiar circumstances of an individual case. As to their frequency, inflammation is more rare than convulsion, paralysis, or other purely neuralgic conditions, and especially so in recoverable instances.

Commotion is either fatal or transient, and remediable by art. It embraces all cases within the two extremes of shock or blow which kills immediately, leaving no visible disintegration or trace of its effect after death, and those examples of protracted reaction, the event of which is uncertain through a period of many days. To commotion I refer alike simple stunning to be followed by present recovery; also those mixed conditions, of alternating stupor and excitement, which terminate fatally after an uncertain interval and depend upon lesion of the substance of the brain. The last are often characterised by so many signs of recoverable shock as to excite great doubts about their actual nature, until the patient begins to die. Torn substance, and fractured basis, in all its forms, are of this class.

Compression, whether by blood or bone, is recognised as occurring in one of two forms:—

1. It is irremediable either from its extent or its intensity; or from the combined operation of these two causes.
2. It may be relieved by taking away the depressed and compressing body.

Compression remediable by art is of two kinds. It is either partial or complete.

When the effect is partial it is marked by signs of irritation; of this order are the spiculated growths,

angular projections, and some of the fractures of the internal table.

The other variety embraces all those cases of collapse, stertor, and insensibility, which mark the action as being at once persistent and complete.

If the whole be reduced to a tabular form, it may be displayed thus:—

Commotion.

1. Fatal, without lesion or reaction of any kind (rare.)
2. Simple, with a brief and healthy reaction (ordinary concussion.)
3. Obscure, with a slow reaction, and recovery more or less complete.
4. Lesion of the substance of the brain with or without fracture of the cranium, uniformly fatal in the latter, and ordinarily so in the former case.

Compression.

1. Directly fatal, whether from the nature or extent of the mischief.
2. Not directly fatal but remediable by art, and occurring in one of two forms.
 - a. Pure, by surfaces of blood or bone.
 - b. Partial, by depressed edges or spiculæ, the symptoms being incomplete and marked by signs of irritation.

(To be continued.)

ON CERTAIN PHYSIOLOGICAL AND OTHER FACTS

OBSERVED DURING THE

TREATMENT OF SPINAL DISEASE.

By SAMUEL HARE, Esq., M.R.C.S.

(Read before the Provincial Medical and Surgical Association, at the Annual Meeting, held at Worcester, August 2nd, 1849.)

It is not my intention on this occasion to enter into particulars as to the various forms and modifications of spinal disease, or the different plans of treatment they require; these I have had opportunities of referring to, when detailing the particulars of several cases, in papers which I have had, on former occasions, the honour of reading before the Association.

My object at present, is to lay before you certain facts, partly of a physiological character, but mainly relative to the improvement which takes place in the general health of patients during the progress of the cure of spinal deformities—facts which have repeatedly come under my notice during the many years I have specially directed my attention to the treatment of this class of diseases.

On the importance of physiological inquiries, I need scarcely insist, for assuredly physiology is one of the most interesting topics connected with our profession, being the basis on which we ought to rest, and the guide to the direction in which we should turn our attention, with a view to improve health, and, consequently, to prolong life, and by which we may introduce more of certainty into our practice.

In all cases of spinal deformity, even where the disease has attained only a *moderate* degree of severity, there is a certain amount of deformity of the chest consequent upon an alteration in the shape or direction, or both, of the ribs; each case may present some minor varieties, in the deformity of the ribs, just as the spine, in each case of lateral or other species of the disease, presents certain differences from other instances of the same class. But, speaking generally, the particular state of the ribs is determined by the kind of deformity with which the spine is affected; thus, in angular projection of the dorsal region, the ribs are compressed laterally, and the sternum projects forwards; in ordinary lateral curvature the ribs of the right side are rounded and projecting, while those of the left are compressed; in other cases the intercostal spaces are diminished, and the muscles very much wasted. All these changes, however, of the ribs from their natural position and direction are attended with certain effects in common,—their own motions are interfered with, they compress unnaturally, and often cause a displacement of, the thoracic viscera, so that, in some instances, the apex of the heart is found beating vertically below the middle of the left axilla; and in severe cases these deformities of the ribs have a similar effect, and to a very considerable extent, upon the viscera of the abdominal cavity, while the great vessels, situated upon the anterior aspect of the vertebræ, are twisted and bent in the same direction as the deformed spine.

As a consequence of these conditions, some of the most prominent symptoms, in advanced states of the cases under consideration, are—

1st. An impeded circulation of the blood through the lungs and other viscera.

2nd. Considerable difficulty in breathing, frequently attended with a cough,

3rd. An almost uniformly congested state of the digestive organs, producing want of appetite, indigestion, &c.

On the subject of the first effect, viz., the state of the circulation of the blood, it is obvious that as this fluid is necessary to nourish and sustain every part of the body, and as from it all the secretions are derived, anything which interferes with its due distribution must be very prejudicial to health. No better adaptation of means to an end can be conceived than that of the heart and arteries to the purpose for which they are intended; but if we take into consideration the curved state of many spines, and the similar state of the large vessels going to and from the heart—if we further consider the contracted state of the chest in such cases, with the necessarily impeded state of the circulation of the blood, we must at once see the injurious effects which pressure, either partial or general, upon the chest and abdomen, must have upon the general health. A due arterialization and a free circulation of the blood being necessary for the healthy performance of the functions of life, it is not surprising that, in patients affected in the manner I am describing,—lassitude, languor, and all their concomitants should be present, and all the functions be disturbed.

It is well known that the blood circulates more frequently in persons of a sanguineous temperament, than in those who are phlegmatic—and conversely, where in a person of a sanguineous temperament, the circulation becomes from any cause impeded—he loses the energy characteristic of his temperament: so, in cases of spinal deformity, the sanguineous temperament is rarely or never met with, the patients being or becoming almost always either of a phlegmatic or of a nervous temperament.

The return of the blood to the heart being interfered with, congestive headaches, sometimes of long duration and very severe, are usually met with in cases of this kind; the nervous system indeed, generally, is much affected, there being in some cases, great mental irritability; while, in others, the feelings are exceedingly depressed, in which case a great degree of torpor and inactivity prevails.

The mode in which deformities of the spine and chest interfere with the motions of respiration—a function most closely associated with that of the circulation of the blood—will at once be comprehended. In ordinary and natural inspiration, the intercostal muscles and diaphragm are contracted, while the abdominal muscles are relaxed; by these means the diaphragm is drawn downwards, and rendered less convex towards the chest, and the ribs being raised upwards, the cavity of the chest is enlarged. In making a deep inspiration, several other muscles, as the scaleni, the serrati, the pectorales, and the latissimus dorsi, &c., also assist, so as to produce a greater effect than in ordinary respiration; thus the ribs are more forcibly raised and the chest is expanded outwards to a greater extent,—the shoulders and other parts being used as fixed points.

In expiration, the reverse action takes place; the abdominal muscles are contracted, while the diaphragm is relaxed. By these means, aided by the important circumstance of the elasticity of the cartilages of the ribs, the ribs are drawn downwards, while the diaphragm is rendered more convex; thus the cavity of the chest is diminished, the lungs are compressed, and the air, or rather part of it, is expelled through the trachea; the more powerful the contraction of the abdominal muscles, the more powerful will be the expiration.

But, when any considerable deformity has occurred, these natural respiratory movements can no longer be efficiently performed; in severe cases, indeed, the heads of some of the ribs become firmly ankylosed to the vertebrae,—in lateral curvature, this especially occurs along the concavity of the curve—so that the only motion admitted of, is that of the elasticity of the cartilages. In lateral curvature, again, on the one side of the chest, the edges of the adjoining ribs come so nearly into contact that the intercostal spaces are almost obliterated, and the intercostal muscles, therefore become atrophied, and almost useless so far as respiration is concerned; while, on the other side, the intercostal spaces are of unnatural width. Again, in some cases, an angular projection of the spine especially, the thorax is tilted forwards, so that the diaphragm presses

upon the abdominal viscera, and its descent in the process of inspiration is interfered with; while from their lateral compression, and from their having lost their natural and graceful curve, the proper expansion of the ribs is at the same time prevented. Thus, while by the natural action of the respective parts of the chest, its expansion is increased in every direction, when the individual is in health, and the respiration is performed without any exertion, (the diaphragm being the chief agent,) in deformities of the chest, respiration is performed both with difficulty and often very imperfectly.

It is almost needless to refer to the importance to the animal economy of a due performance of the respiratory functions, nor need I do more than mention a few of the symptoms usually met with in cases of spinal deformity to show the injurious influence which deficient respiration exerts in persons thus affected.

Allusion has already been made to the disorder of the circulation induced by deformities of the chest, and the function of respiration is so intimately connected with the circulation of the blood, that the latter is still further interfered with by the derangement which the former suffers in these cases: thus there is ordinarily present in cases of spinal and thoracic deformity a certain amount of dyspnoea, with palpitation of the heart, which are often from an inconsiderable degree of exertion, so much increased as to be truly distressing; hence, congestion of the lungs is not unfrequently produced, accompanied with a certain amount of cough, which, in some instances, becomes more or less constant.

Free and natural respiration is necessary for the due arterialization of the blood,—for those changes in it which are required in order that the nutrition of the body may go on healthily—that the secretions and excretions which are eliminated from it may be of a normal character—and that the natural temperature of the body may be maintained; but in such cases as I am referring to, the defective arterialization and the deficiency of the circulation of the blood are obvious by the somewhat livid or bluish appearance of the complexion which is often present on exertion, and the coldness of the extremities and frequently of the body generally, which is complained of; while the delicate appearance usually presented by this class of patients may probably be referred, in a great measure, to the imperfect manner in which the necessary chemical changes take place; as may likewise the fact, that when the disease progresses considerably, the growth of the body is frequently arrested, or at least suspended; dependent also, probably, upon the contracted state of the chest, is the peculiar character of the voice, not unfrequently met with in cases of deformity.

Nor can it be any matter of surprise that such extensive mischief should ensue from pressure thus produced upon the thoracic viscera, when it is understood *how much* their natural functions and healthy actions are interfered with. With respect to the heart, the interference can only be estimated approximatively; with regard to the lungs it can actually be measured by ascertaining the number of cubic inches of air which a patient can expire, and comparing that with the amount

expired, on the average, by persons of similar height, in the enjoyment of good health and free from deformity. Such measurements I have long and frequently made by means of the pulmometer (an instrument described in my work "On Spinal Disease,") and have found that the breathing capacity is often deficient to the amount of 40 or 50 cubic inches, or even considerably more than this; and in one case of excessive deformity, which I shall presently again refer to, the deficiency amounted to 65 cubic inches.

The effect of considerable deformity in producing unnatural pressure, and consequent disturbance of function, extends, as has already been hinted at, to the abdominal viscera, which, like those of the chest, are very apt to become congested; under these circumstances the liver becomes inactive and its secretions unhealthy, the bowels constipated, digestion goes on imperfectly, and the chyle formed for sanguification is therefore of an unhealthy quality, so that the blood, being originally derived from the chyle, also partakes of the same unhealthy character, whence result in a great measure, the debility and inaction—the loss of muscular activity, with the languor and listlessness which are the usual concomitants of spinal deformity. The healthy action of all parts of the body being thus dependent upon one another, it is obvious how the most injurious effects must follow when so much pressure is made upon organs which are necessary for the continuance of life and even the maintenance of health.

As I stated at the commencement of the paper, the object I have had in view has not been to enumerate all the symptoms of spinal disease, and much less to mention the various complications which may accompany it; I should, otherwise, have had to dwell upon the *secondary* effects which it sometimes produces on the nervous system—the great irritability which it causes in some cases—the muscular contractions on the one hand, or the paralysis on the other, which it may give rise to; I should have had to speak of the various abscesses which sometimes occur, and of many other points, which would have prolonged my paper much beyond the limits I intended, besides being foreign to the subject which I wished to bring more immediately under your notice, viz., those effects which result from the unnatural pressure caused by spinal deformity upon the viscera of the chest and abdomen, and which effects, being so dependent, almost immediately disappear as the deformity itself is relieved by treatment. Neither does time allow that I should enter into any details of the plans of treatment which the different forms of spinal disease require, and it is perhaps the less necessary for me to do so at present, as I have had opportunities, on other occasions, of entering on these subjects when speaking of individual cases, as well as in my work on the disease; I may, however, so far trespass on your time as to state, that recumbency almost always forms an important item in the plan of treatment I adopt, together with the removal of the weight of the head and shoulders from the deformed spine by means of slight, but, from time to time, gradually increased extension, employed at the same time with the recum-

bency; besides which, at intervals during the day, a certain amount of pressure is applied, partly by means of compresses attached to the plane on which the patient reclines, and partly by friction with the hand to the projecting parts, in such a direction that its tendency is to bring the deformed parts towards their natural position, and to remove that *unnatural* pressure which is exerted by them upon the internal organs.

Amongst the earliest points of improvement noticed by almost all patients, as their deformity becomes relieved, are, the loss of their former dyspnoea and their much greater freedom of breathing; these are dependent upon the greater ease with which the movements of respiration are performed, owing to the ribs assuming more of their natural shape and position, and to the action of the diaphragm being facilitated by the removal of the pressure from the abdominal viscera. I have noticed in a preceding part of this paper, the fact of the breathing capacity of deformed persons being considerably below the standard of health; and I may here add, that as the patients improve in their deformity, their breathing capacity approaches more and more towards the healthy standard. Thus, in a young lady from the north of England, aged 17, affected with lateral curvature, the breathing capacity increased in nine months 52 cubic inches, viz., from 78 to 130; in another case the capacity was augmented from 62 to 100 in three months; and in a third, from 100 to 150 in twelve months. A young lady, aged 16, with long-standing and very severe lateral curvature, combined with excurvation, when she came under treatment, measured 4 feet 6 $\frac{1}{2}$ inches in height, weighed 5st. 9 $\frac{1}{2}$ lbs., and could expire *only* 30 cubic inches of air; at the end of little more than eleven months her height had increased to 4 feet 8 $\frac{1}{2}$ inches, her weight to 6st. 2lbs., and her breathing capacity to 69 inches, being an increase of 39 inches. Another, aged 13, within five months increased 1 $\frac{1}{4}$ inches in height, 13 lbs. in weight, and 27 cubic inches in the capacity of the chest. And, to add one more, and a very remarkable case, that of a patient, aged 23, who was exceedingly distorted from rickets; her height, which was only just 36 inches, increased, within twelve months, more than 5 inches, and her breathing capacity, which was ascertained at intervals of about a month, increased gradually from 25 cubic inches, which was the utmost she could at first expire, to 51, 71, 79, 83, and 90 cubic inches respectively, showing a total increase of 65 cubic inches. Such an alteration having taken place in the capacity of the chest, it may readily be conceived how it is that the difficulty of breathing, complained of in cases of deformity, is usually so much relieved at the same time the deformity is remedied; the circulation also becomes more regular, and the palpitations less troublesome, in proportion as the heart's action is less interfered with, in consequence of the improvement in the shape of the chest.

At the same time that the breathing improves, the patients usually lose the troublesome, though not severe, cough with which many of them are affected; and as the pulmonary circulation becomes freer, and the blood better oxygenated, and therefore better fitted for its

important functions, the coldness of the extremities, so generally a matter of complaint with this class of patients, disappears. It is also, probably in a great measure, owing to causes of this kind that the headaches are likewise so much ameliorated, though that result is doubtless also partly dependent upon the improvement which ensues in the condition of the digestive organs. That the imperfect manner in which the latter discharge their functions, and that the general torpor of the alimentary canal are much owing to the pressure to which they are subjected in cases of deformity, I feel no doubt; and I am equally convinced that the improvement which takes place is, in a great measure, due to the removal of this injurious pressure, though the exact extent to which this cause acts may be somewhat difficult to determine, as attention to the general health is combined with the treatment necessary for the relief of the spinal disease. The combination of local and general treatment is most conducive to the welfare of the patient, and indeed is essential to it, but renders it a difficult point to eliminate from the other the amount of merit due to each part of the treatment, so far as regards the improvement which takes place in the digestive apparatus.

When spinal disease takes place during the period of growth, it is not unusual for this to be arrested, or at least for its progress to be materially diminished, so that deformed persons are often not only so much less than they ought to be, by that amount which would be accounted for by the actual shortening of the spinal column, but the rest of the body is frequently smaller and shorter than it would otherwise have been, as may be witnessed almost every day in our streets, and as I saw well marked, last week, in the case of a patient who consulted me, whose height, though she was 22 years of age, was only 51 inches. Now, there is this remarkable circumstance attending the treatment of such cases, if it occur during the period of growth, that, after the deformity is relieved, not only does the process of growth often recommence, but nature sometimes appears to make an effort, if I may use the expression, to compensate for lost time, for not only have I frequently known young persons who had grown but little or none at all for some time before treatment, commence doing so afterwards, but in some cases the growth has been so rapid as apparently to be explicable only on that supposition; thus, a young lady aged seven years, whose growth had been arrested for some time before I saw her, increased, during the time she was under treatment, $2\frac{1}{4}$ inches, and in the fifteen months subsequent to her return home, no less than five inches.

Theoretical objections are sometimes urged against the use of the recumbent position for the treatment of spinal deformity, under the supposition that it may be injurious to the general health; I would answer that a careful study of the pathological condition of the parts affected in cases of angular projection, and, indeed, wherever caries, (or softening of the vertebrae, as in some cases of lateral curvature,) exists, would show it to be the only rational plan—the only one likely to insure permanent success; and experience, which is

after all our best and surest guide on such subjects, tells plainly that, so far from patients suffering from it, when it is rightly employed, and when attention is at the same time paid to the digestive organs and the general state of the system, they *uniformly* improve in health, and get stouter.

As I stated, it was not my intention to have illustrated this paper by the detail of any case, but having at present two under treatment of so interesting a character, and so much to the point, I feel it desirable to notice them. One of them is the case of a young lady, aged 16, who, besides labouring under lateral curvature, has also suffered from a destructive ulceration of the nose (lupus,) during the last eight or nine years; it first commenced on the outer side of the right ala, near its point of junction with the upper lip. From that time up to last Christmas it had made gradual, though not rapid progress; the ulceration during that period had extended to the end of the nose, which was itself enlarged and indurated, while a small portion of the right ala had been eroded. She came under my care in March last, and in the interval between Christmas and that time, the progress of the case had been much more rapid, notwithstanding every pains, during its whole course, had been taken to arrest the disease. When I first saw her the greater part of the nose was red, hard, and painful, the ulcerative process had extended to both alæ, a portion of which, especially the right one, together with the end of the nose, were destroyed, while the only portion of the lower part of the septum which remained, was that part of it united with the upper lip, over which it partly hung. I have pleasure in stating that, besides the patient being relieved of the spinal affection, the ulceration is now entirely healed, the remaining portion of the septum having been supported in its natural position by a small compress and strips of adhesive plaster, and is now united and healed there. In this case the recumbent position was deemed absolutely necessary, alterative aperients were prescribed, together with occasional saline purgatives, while the nose was poulticed twice daily, care being taken to support the septum as before mentioned. Blisters, as counter-irritants, were occasionally applied to the part. Neither arsenic nor iodine in any form were prescribed, nor mercury, except as an occasional purgative.*

The other case is that of a young lady, aged 25 years, and resident in the county of Kent, affected with lateral curvature and a high degree of spinal irritation. She had always been from childhood exceedingly delicate, but much worse since she had a severe attack of inflammation of the brain, six years ago. This left her in such a state of weakness that she had not been able to walk at all since, nor even to use her hands sufficiently for writing, not having written a note from that time to coming under my care. In this case the use of the recumbent position (with other remedies as are more particularly detailed in my "Practical Observations,

* Drawings of this case, one taken prior to my seeing the patient, and the other a few days before I read the paper, were exhibited at the meeting.

&c.") was equally necessary, as in the preceding instance, and the results have equalled my warmest expectations. Although it is not yet two months since she commenced treatment, she is able, with the assistance of her mother and sister, to pace the room comfortably. Her spirits, which were much depressed, have become excellent, and she has recommenced correspondence with her friends.

ON THE USE OF THE PROBANG.

To the Editor of the Provincial Medical and Surgical Journal.

SIR,—I feel much obliged to Mr. Morgan for the interesting case he has so well narrated in the last number of your valuable journal, and as I once met with a case that might have terminated unfavourably by my own hand, I beg leave, with all due deference to that gentleman, to offer the following remarks.

Yours obediently,

WM. NORRIS, M.D.

Stourbridge, October, 1849.

About twenty years ago, Samuel Haywood, aged 60, of Whittington, near this town, came to me, and said he had swallowed a large bone, which stuck low down in the œsophagus, and gave him great pain. He had taken a hasty repast from a neck of mutton. I introduced the probang, which was obstructed by a firm substance that resisted the farther introduction of the instrument. I was young, perhaps adventurous or rash, for I repeatedly and very forcibly pushed downwards the instrument; at length it passed into the stomach, and I found to my great dismay I could not withdraw it, but after several attempts up came the bone followed by the probang, and I have not yet forgotten the shudder—from the appearance of so large a bone, together with the suffocating effects on the patient—that came over me. The bone was nearly an inch and a half in length, and its base nearly as thick as my smallest finger, the point sharp and nearly triangular. The man suffered severely, but slowly recovered, and many of his children are alive, and well remember the accident.

By these violent efforts I might have forced the bone into or through the coats of the aorta, and sudden death might have followed—a very unpleasant dilemma for a young practitioner. This case clearly points out the propriety, when large and sharp bones are swallowed, of a consultation with a senior practitioner.

If this bone, which from its size, must have remained firmly transfixed across the œsophagus for a considerable time, what might have been the consequence?—first, urgent distress; and secondly, if its sharp spicula had been in close contact with the aorta, the action of so large a vessel, from its frequent and regular pulsations, would have soon set up an ulcerative process in its coats, and a fatal hæmorrhage must necessarily have followed. This case shows the necessity of introducing the probang;

and should the operation, together with the convulsive efforts of the œsophagus, force the bone through the artery, the surgeon has done his duty, however unpleasant that duty might have been, for it is most likely that a fatal termination must have ensued by nature's own processes.

The coats of a large artery like the aorta, are so thick and firm, it would be no easy matter to tear or cut through them when filled with a yielding fluid, like blood; and I think very few patients would be satisfied to suffer intensely many days, knowing a foreign body to be lodged, without sending for a variety of practitioners, and perhaps some young aspirant may, with good luck in the operation, clip the wings of a far-famed senior.

If a bone punctures the outer coat of the aorta, then there would be great risk in interference, but even then the only chance would be, the removal of the foreign body, for the external laceration may, by loss of blood and low diet, heal. If a bone penetrates fairly into the artery, then it would be unwise to remove it. But how are we to know this? In fact we shall never be able to prove it; but we may presume, which is most probable, that death would in most cases speedily take place, unless the wound be exceedingly small. I am inclined to believe, that the constant succession of so large a stream as passes through the aorta, would soon disentangle a foreign body.

But to analyze Mr. Morgan's remarks more minutely, which I wish to do with all good nature, but in the cause of science most freely, which I am certain that gentleman will allow to be quite necessary in a case involving so many interesting points.

Is it not probable that the first hæmorrhage occurred from some of the vessels of the œsophagus, or its vicinity? for hæmorrhage once having taken place from a wound in so large an artery, so many days after the accident, the frequent pulsations must preclude all hope of that hæmorrhage ceasing for forty-eight hours. The bone once loosened by ulceration, the frequent impulse from such a stream would necessarily disentangle it very speedily; it is possible that the bone may have penetrated the first coat of the artery, or I am more inclined to believe, (and the size of the wound favours the idea,) that as the spicula was in contact with the artery, thus irritating the coats, an ulcerative process would be slowly set up, and occasion death. In violent cases we are justified in adventuring with our remedies in medicine, and in surgical cases with our instruments, or many lives would be lost; but we must adventure with the greatest caution.

I do not think in the act of deglutition the force would be sufficient, first to pass the bone through the œsophagus, and then through the artery, or even to pass through the artery alone.

Many years ago an old surgeon in this town broke a probang in an old woman's œsophagus, and she died next day. I requested Mr. Weiss to make an instrument that would not break, and I shall request my zealous and excellent friend, Dr. Hastings, to exhibit it at the next meeting.

CHLOROFORM IN HYDROPHOBIA.

By S. B. DENTON, Esq., M.R.C.S.

George Witty, aged 5 years, on his way to the infant school, on the 16th of October, 1848, was bitten by a dog through the under lip. The wound was quite free from pain, and soon healed.

The child betrayed no symptom of indisposition until the expiration of a month. On Sunday, the 12th of November, the child went to school as usual, and nothing uncommon was noticed until dinner time, when he refused to eat anything. His mother asked him why he did not eat his dinner. He replied that he felt sick and weary, and had been so the whole day, accompanied by unusual perspiration. She prevailed upon him to eat a little potato, but could not induce him to take any liquid.

Not complaining of any pain he was sent to school again, and during the time he was there the teacher perceived no alteration in his general appearance. When he returned home he again complained of being very tired, and wished to sit upon his mother's knee.

Tea time came, but he took nothing, and being fatigued was put to bed. When he had been there a short time he asked for something to drink two or three times. Accordingly something was taken him, and he tried to swallow it, but as soon as it came in contact with his lips he was alarmed, and gasped for breath. Sometimes he would in an agony endeavour to gulp a little tea down, and then throw the cup away with great violence. Upon being asked why he was so impatient, he said he could not help it. After he had obtained some sleep fever began to make its appearance, and at intervals he was delirious, and occasionally complained of pain in the chest and throat. He continued in this state until the morning. No alteration took place during the whole of Monday, excepting a wilder expression of the eyes, and he also shewed a stronger aversion to drinkables, although it was very evident his thirst had much increased.

On Monday night he again said he had great pain in the chest and throat, the expression of his eyes more fierce, he breathed with greater difficulty, and inspirations deeper. When his mother put him to bed she threw the clothes in rather a careless manner over him, and the partial air so produced, puffing over his face, occasioned violent involuntary starting and fright, approaching to convulsions, the same as when he attempted to take any fluid. During the whole night he was occasionally delirious, and had frequent short intervals of sleep, but generally awoke in dreadful alarm and fright. About three o'clock on Tuesday morning, the 14th, he awoke in terrific agony, saying that a pin was running into his head. At four o'clock, A.M., he jumped out of bed and ran down stairs, "declaring that if he stayed in *that* bed he should choke." His mother followed him, and found him in the kitchen, in strong convulsions. As soon as he recovered a little he rubbed both his sides and said they hurt him very much; he also would have his mother "feel his sides, as he said they were very soft."

From six to eight o'clock he complained of pain on each side of the head, and then in every part of the body.

At ten o'clock, A.M., a tough, mucous, frothy-like saliva came from his mouth, which continued to increase until his death; frequently the foam accumulated to the size of an orange.

Chloroform was perseveringly administered, but the vapour upon the branches of the olfactory nerve produced such terrific fright, screaming, and convulsions, that *I was glad* to discontinue its use.

Every remedy administered produced not the slightest impression on the complaint. Aconite, opium, Ant. Potassio. Tart., enemas, rubefacients, assafetida, and ice, were energetically used, but without the slightest avail, and the poor sufferer sunk about a quarter past five, P.M., in one long convulsive struggle.

Hornsea Holdness.

Hospital Reports.

SOUTH STAFFORDSHIRE GENERAL HOSPITAL, WOLVERHAMPTON.

CASE UNDER THE TREATMENT OF JOHN TOPHAM, M.D., LIC. (EXTRA URB.) ROYAL COLLEGE OF PHYSICIANS, AND PHYSICIAN TO THE HOSPITAL.

HYPERTROPHY OF THE SPLEEN.

Joseph Bennett, aged 28, was admitted into the South Staffordshire General Hospital, Wolverhampton, March 28, 1849. He is employed in working in the coal mines. The history which he gives of the first detection of the disease under which he now labours is curious.

Five months ago his fellow workmen observed that his abdomen was larger than it used to be, and joked him for having "a big belly." He all the while was unaware of the enlargement until difficulty of breathing, when engaged in his work, called his attention to it.

He is a very clear-headed fellow, and states his case exactly. He never had any fever, intermittent or other, and does not think that he has received any particular injury in the abdomen more than his trade exposed him to. When first observed, the tumour was rather to the left of the umbilicus; but the man seems to have thought very little about its existence until he saw me.

March 27th, 1849.—He now has great abdominal enlargements, insomuch that I at once set him down as having ascites, and without looking to his abdomen, listened to his heart-sounds. There is a murmur coincident with the first sound, loudest at the base, but not accompanied by any other sign of disease in the heart. The lungs appear to be perfectly healthy. Perhaps, slight pulmonary emphysema exists. The whole of the left half of the abdomen is occupied by a firm solid tumour, extending from the region of the

spleen, (where there is absolute dulness on percussion) down into the pelvis, across the lower part of the abdomen into the right iliac fossa, and then terminating by a defined margin, which runs up from a situation near the right crista ili to the ensiform cartilage. For a distance of some three inches to the left of this margin, strong percussion elicits the sound proper to the intestines, but beyond, that is, to the left of this, all is quite dull, and this as high as up to the left lowest true rib. The tumour is not lobulated, nor painful on pressure. He measures 35 inches round the abdomen. the whole progress of the disease seems to me to point to the spleen for its seat of origin. There has been no pain, and no disorder of function of any of the abdominal viscera; no sickness, purging, or other sign of disease. The dulness, which is more marked over the spleen than elsewhere, and a peculiar pallidity of the skin, led the attention to that organ. There is no ulceration in any part of the body, though this has been noticed in connexion with chronic enlargement of the spleen by various authors—Celsus, Morgagni, Twining, Wood, Voight, Aretæus, Graves. Ordered him to rub in the Unguent. Iodinii Co. over the tumour twice a day, and to take iodide of potassium, in three-grain doses, thrice daily, with aloetic purgatives.

April 6th. Measures thirty-six and a half inches round abdomen. He was made an out-patient April 11th; came again April 23rd. The measurement round the abdomen at its most prominent part is now thirty-eight inches. He has been using the ointment and mixture all the time. He has internal hæmorrhoids. Says that he does not feel weaker, but has not a good appetite. Has œdema of the legs and thighs. To have amorphous quinine, in two-grain doses, added to the iodide of potassium mixture, the latter to be taken in five-grain doses.

April 27th. Presented himself to-day at the hospital, and says that he feels stronger than when an in-patient. The size of the abdomen is now two inches greater than it was when last measured. Continue medicine.

He continued under treatment as an out-patient until the 7th of July, on which day he walked four miles in order to come to the hospital. During the whole of this time he continued the application of Unguent. Iodinii Co. to the abdomen, and took iodide of potassium and iodide of iron. The size of the tumour rather increased on the last occasion of my seeing him, and the liver appeared to have risen higher into the thorax. No fluctuation was perceptible in any part of the abdomen, and there was no œdema of any portion of the body. On Tuesday, July 10th, a man came to say that the patient had died on that morning, at five A.M., quite tranquilly, and without pain.

Post-mortem examination thirty hours after death.—The examination of the body was made by Mr. Pope, the house surgeon of the hospital, in my presence. Weather very hot. Abdominal integuments a good deal discoloured from decomposition; face much distorted from some cause. The friends would only sanction

the opening of the abdomen, so that any morbid appearance within the head or lungs could not be ascertained. On opening the abdomen by an incision carried down the middle line, and another made at right angles to it on the left side, the major portion of the cavity was at once seen to be occupied by the hypertrophied spleen. The coat of this organ looked natural, and the internal structure of the spleen, when cut into, did not appear to vary much from the normal condition, save in being rather denser than natural. The organ was slightly adherent to the great end of the stomach, but not to any other of the abdominal viscera. The spleen being removed, was found to weigh no less than *fourteen pounds*, and it measured in length $18\frac{3}{4}$ inches, and across $12\frac{1}{2}$, the surface being quite even. The liver was gorged with blood, and weighed seven pounds seven ounces and a half. In one or two of the mesenteric glands there was a little cretaceous matter. The kidneys were gorged with blood, as was the liver. Weight of right four ounces; of left, four ounces and a quarter. The intestines were quite healthy, and there was *no peritoneal effusion* whatever. The diaphragm was now cut through, and the heart extracted. This was turgid on the right, and empty on the left, side. The right ventricle contained a large yellow coagulum, as did also the right auricle, and this extended into the vena cava descendens as far as it could be traced. The left ventricle had similar particles of coagulum scattered between the columnæ carneæ. Weight of the heart when emptied and washed five and a half ounces. Parietes of the heart rather soft; ventricles of natural size; valves healthy, except the aortic opening, which was slightly contracted.

Provincial Medical & Surgical Journal.

WEDNESDAY, OCTOBER 31, 1849.

THE Queenshead case which has been so much vaunted by the Editor of the *Homœopathic Times* and his followers, as an instance of the powers of homœopathy generally, and more particularly in curing hydrophobia, requires nothing but a casual examination to demonstrate, that it is only one more proof of the facility with which man often dupes himself and his fellow-creatures. The correspondence in the *Halifax Guardian* on the subject, between Dr. Inglis and Mr. Ramsbotham, would occupy nearly twenty pages of this journal, and it is therefore impracticable to lay it before our readers *in extenso*; but the following brief summary will be sufficient to explain the real merits of the case, omitting all personal matters in dispute which have little to do with the question at issue.

On the 6th of June, 1849, James Hopkinson, of Queenshead, and three other men, were bitten

by a rabid dog; two of these men subsequently died of hydrophobia, attended by Dr. Inglis, of Halifax, and Messrs. Fawthrop and Jowet, of Queenshead. Mr. Ramsbotham, who now practises homœopathy, near Huddersfield, then saw the survivors, and informed them that in him they must look for their only hope of safety, as the disease was incurable under allopathic treatment.

It is not wonderful, after the unsuccessful issue of these cases, that these poor men should be ready to adopt any means which promised them relief; accordingly, on the first appearance of ailment, Hopkinson summoned Mr. Ramsbotham to Queenshead, where he arrived at four o'clock A.M., on the 6th of August, exactly two months after the infliction of the injury, and proceeded to treat his patient by giving him infinitesimal doses of lachesis. About four hours after his arrival he called upon Mr. Fawthrop, whose residence is near that of Hopkinson, and told him that another of the men bitten on the 6th of June was attacked with hydrophobia, and that he was under homœopathic treatment, which he hoped would restore him to health, and we conclude, though it is not so stated, invited him to inspect the progress of the case. Mr. Fawthrop, not doubting the correctness of the diagnosis, immediately summoned several of his professional brethren to witness with him this wonderful proof and intended test of the powers of homœopathy.

Now, up to this point both the parties engaged are worthy of commendation,—Mr. Ramsbotham for his readiness to show his mode of treatment, and Mr. Fawthrop and his friends for the trouble they took to investigate it; and if Mr. Ramsbotham could prove that at this period, while the termination of the case was still uncertain, either of these gentlemen, (who we must observe had very recently been conversant with the disease,) had pronounced the case one of hydrophobia, he would have strong grounds for asserting that he had been enabled to do what is beyond the power of allopathy to effect. But fortunately for the truth, no sooner had Mr. Fawthrop seen the case, which he did within four or five hours of the commencement of the treatment, than he at once pronounced it an ordinary attack arising from cold, fatigue, and intemperance, *and so satisfied was he of this, that he immediately despatched a second messenger to Dr. Inglis, at Halifax, to prevent his wasting his time on a*

fruitless errand. In this attempt, however, he was foiled, as Dr. Inglis having missed the messenger, arrived at Queenshead and saw the patient at twelve o'clock; so that, within eight hours of the time when he was first seen by Mr. Ramsbotham, the case was examined by Mr. Fawthrop and Mr. Jowet, of Queenshead, and by Dr. Inglis and Mr. Holroyd, of Halifax, and they all agreed that it was no attack of hydrophobia, but one of an ordinary nature. Dr. Inglis, indeed, was informed by Hopkinson, that he had not suffered from spasm of any kind, and, in fact, that he was then in the same state as he had been for the last twelve hours.

It cannot for a moment be contended that either of these gentlemen would refuse to admit that the case was one of hydrophobia, from the fear of its being cured by homœopathic means; the disease is unfortunately so fatal, that no one would hesitate to allow the test to proceed openly and fairly, with the full conviction that the one system would at least be as unsuccessful as the other. The internal evidence is quite sufficient to convince an unprejudiced mind, that as these gentlemen were competent to form an opinion—since they were well educated medical men of experience, and, moreover, had recently watched two cases of the disease in question—so they really did come to the conclusion in opposition to that of Mr. Ramsbotham, *and before the termination of the treatment*, that it presented no symptoms of hydrophobia. Now, if this opinion had been given at a later period, there would have been some excuse for the assertion of the Editor of the *Homœopathic Times*, that if the patient “had died as the man under allopathic treatment had done, we never should have heard one word more of the matter;” but the facts, as here narrated, are admitted by Mr. Ramsbotham himself, after proof of them had been afforded by Dr. Inglis, supported by the evidence of Mr. Fawthrop, Mr. Jowet and Mr. Holroyd. Indeed Mr. Ramsbotham only now maintains that he had some grounds for believing that it was a case of incipient hydrophobia, and we can easily pardon the mistake in a person who had not seen the disease. But the Editor of the *Homœopathic Times*, not satisfied with defending the correctness of the diagnosis, vaunts the case as a successful cure of hydrophobia, and in a long tissue of casuistical argument, seasoned with abuse of allopaths in general, and Dr. Inglis in particular, contrasts the successful treatment

of Hopkinson by Mr. Ramsbotham, with the unfortunate termination of the two cases which had been under the care of Dr. Inglis and his fellow-allopaths.

Such, then, is a brief history of the transaction which has been put forth by the Editor of the *Homœopathic Times*, as an instance of the unfair opposition which is maintained by the profession to the doctrines of Hahnemann. But surely no one ought to complain, if as in the case before us, misstatements publicly put forth, should be as publicly corrected. If Mr. Ramsbotham had simply adduced his own opinion on the nature of the disease, in opposition to that expressed by several highly respectable medical men, who it was well known had that experience in which he was deficient, no one, we believe, would have had either the power or the will to interfere. We are staunch advocates for entire freedom of action in medical practice, we think that all have a right to follow the precepts even of Preissnitz, Hahnemann, or Mesmer, if they conscientiously believe in their truth; but when the results are to be given to the world, and most of all when published in the columns of a general newspaper, care should be taken to avoid that semblance of "cooking" the case, to the charge of which Mr. Ramsbotham has rendered himself obnoxious.

We have thought it necessary to make these remarks, because we believe that the system, being wholly inoperative, ought to be resisted as an imposition on the credulity of the public, and in charity, we trust, of those who practice it. We are afraid that too many of these display their insincerity, at the same time with their want of confidence in its powers, by giving allopathic doses in acute cases of disease; but while statistical details are so easily produced to show the comparative advantages of homœopathy, hydro-pathy, or any other system in fashion with its votaries, we have no right to charge all as impostors who believe in the efficacy of trituration and subdivision. It is, however, our duty, as public journalists, to proclaim the truth wherever it can be found, and we have in this instance most cordially to thank Dr. Inglis for unmasking the features of a case which would doubtless, but for his exertions, have been used in allopathic doses, for the purpose of promulgating the superior advantages of the system under which the recovery, from so dire a disease, had been supposed to be effected.

To the Editor of the *Homœopathic Times* we

would simply suggest the propriety of taking example from his friend Mr. Ramsbotham, who, we must confess, has conducted the correspondence with as much courtesy, if not with as much candour, as could reasonably be expected. We would also impress upon him, that neither in censuring the conduct of individuals or associations, is abuse permanently available. His sophisms are so flimsy as to deceive no one but an uneducated reader; but as he professes to address himself, not only to his professional subscribers, but also to the general public, we conclude that such equivocal use as he has made of the word *spurious*, in referring to Dr. Inglis's account of the nature of the attack, can only be intended *ad captandum vulgus*. To advance such a garbled statement even to a tyro in medicine, would be an insult to his understanding.

Reviews.

Cholera; an Analysis of its Epidemic, Endemic, and Contagious Character, with Original and Peculiar Views of its mode of Propagation, and the means of Counteracting it, &c., &c. By HENRY STEVENS, M.R.C.S.

The Cholera Psychologically considered. By FORBES WINSLOW, M.D.

The above are the titles of two of the numerous pamphlets which the recent epidemic has called into existence.

The main object of the first of these essays is to point out the principle upon which the author considers that cholera ought to be treated, which is that of exhibiting medicines known to have an antiseptic action upon the fluids and solids of dead animal substances. Such are creosote, arsenic, charcoal, alum, pyroligneous acid, &c. Of these, the author prefers creosote in the premonitory diarrhoea, but if the symptoms prove threatening, he has recourse to mercury, either in the form of calomel or the bichloride, the action of which he also maintains to be antiseptic.

The author is a believer in the contagious nature of cholera, for the following reasons:—1st. That in its course from one country to another it has always followed the most frequented routes. 2. That, if a person who has been exposed to the influence of cholera, and has had premonitory symptoms, be removed to a spot where the disease has never prevailed, and becomes worse, others who have attended upon him are often observed to be attacked.

The peculiar poison of cholera he supposes to be

generated in the alimentary canal from which it is absorbed, vitiating the blood, and eventually depriving it of its vitality.

Dr. Winslow treats of the disease in reference to its connection with mental agency. This he does by discoursing on the known effects of terror on the bodily functions, and more especially on its remarkable influence upon the mucous membrane of the bowels.

"Considering the subject of cholera psychologically, I have, (he observes,) no hesitation in asserting that the disease has been much aggravated and extensively diffused by moral agents. * * * That in some instances the disease itself has been induced by great depression of mind, fear and anxiety is also capable of demonstration."

If, by this passage, Dr. Winslow means that terror will render an individual more susceptible of the disease, when the elements of that disease are surrounding him, we fully agree with him; for fear, like any other depressing agent, will cause the system to be less able to resist its attack; but that fear will induce cholera solely in virtue of its known effects upon the intestinal canal, we cannot admit.

One part of Dr. Winslow's pamphlet has our cordial concurrence, namely, that no good can possibly arise, but on the contrary considerable mischief, from the custom of reporting the number of cholera cases in the daily papers. That such returns should be made is indispensable, but their publication should, we conceive, be restricted to medical periodicals, or they should eventually be brought together in a special volume. The daily parade of the number of victims to this fearful pestilence, cannot fail to have an injurious effect upon survivors, by depressing their vital powers through the influence of dread.

This pamphlet is well timed, and contains injunctions which are worthy the attention both of the public and the profession.

Proceedings of Societies.

REPORT

OF THE

MICROSCOPICAL SUB-COMMITTEE

OF THE

BRISTOL MEDICO-CHIRURGICAL SOCIETY.

At a meeting of the Microscopical Sub-Committee of the Medico-Chirurgical Society, held at Mr. Swayne's, Berkeley Square, October 10th, 1849,—Present, Drs. BERNARD and BUDD; Messrs. J. C. SWAYNE and J. G. SWAYNE, BRITTAN, PRICHARD, and NEILD,—

After the reading of the following report, its adoption

was moved by Dr. Budd, seconded by Mr. Swayne, sen., and unanimously agreed to.

Report of the Sub-Committee appointed to investigate the Nature of Cholera, by means of Microscopic Observations.

On the 9th of July, 1849, Mr. Brittan and Mr. J. G. Swayne examined separately specimens of rice-water evacuations, which Dr. Budd had obtained from two patients in the cholera hospital.

At the next meeting of the Sub-Committee they separately described and produced drawings of some peculiar bodies which they had noticed in the matters examined. The descriptions and delineations given by these gentlemen coincided perfectly, and they were submitted to the attention of the Medico-Chirurgical Society, on the 14th of July. The general impression at that time was that the bodies in question were *sui generis*, and had never before been observed in any part, or in any secretion, of the human body.

From this period must be dated the separate observations of Mr. Brittan. He examined a series of cases, published in his table in the *Medical Gazette*, from No. 3 to No. 20 inclusive. The results of these observations were, that the peculiar corpuscles were constant in the intestinal discharges of cholera patients, and that they were to be found in the matters vomited, as well as in the dejections; that they are "small and clearly defined in the matters vomited; that they become larger and more compound in the dejections; and as the disease progresses favourably, they vanish with the disappearance of the symptoms." "In very rapidly-fatal cases these bodies are sometimes to be met with only in very small quantity, or are altogether absent (probably from not being thrown off by the intestine.)" Mr. B. found them in the dead body, "adhering to the mucous membrane in shreds of white matter, and very abundant."

He examined under the microscope specimens of healthy fecal matter, and of the fluid stools of typhus and other diseases, but he failed to detect anything corresponding with the peculiar corpuscles belonging to cholera dejections, though he discovered these bodies in "cases of severe choleraic diarrhoea." From these observations he inferred that the bodies in question were peculiar to cholera, and bore "some essential relation to the disease."

Mr. Brittan next set himself to examine the atmosphere in places where cholera was prevailing, with a view of ascertaining whether it contained the same corpuscles as those found in the patients. In his researches he had the advantage of many valuable suggestions, and much active co-operation, from Dr. Bernard.

On the 19th of July he condensed one drachm of fluid from the atmosphere of "a house from which five

patients had been removed, the day previous, to the cholera hospital, and two of whom died," and in this fluid he discovered bodies identical in appearance with some of the smaller choleraic bodies. The same result ensued upon a like experiment in the Bridewell. Afterwards the atmosphere of districts free from cholera was examined, but it yielded no evidence of the presence of the bodies in question.

On the 2nd of August Mr. J. G. Swayne, who had been interrupted by domestic circumstances in his prosecution of the observations already mentioned, resumed his researches, and examined a series of cholera discharges, which afforded results more or less similar to those which he had previously described. A summary of them has been given in the tables comprised in Mr. Brittan's paper in the *Medical Gazette*, (Sept. 29,) and in Mr. Swayne's paper in the *Lancet*, (Oct. 6,) making altogether thirty-four cases. Mr. Brittan's own table contained twenty cases, extending from the 10th of July to the 24th. The first two were from the same specimens as the first two in Mr. Swayne's table.

About the last week in August or the first in September, Dr. W. Budd reported that he detected bodies identical with the choleraic corpuscles in drinking water, obtained from cholera districts. He says,* "Shortly afterwards, and being at the time aware of this discovery, I detected the same organisms in great numbers in almost every specimen of drinking water which I was enabled to obtain from cholera districts. First, in the drinking water from Wellington Court, Redcross Street, where cholera first broke out, (with any violence,) in Bristol; subsequently, in the water of the Float, and in the drinking water from King Street, in the same city; since then, again, in London, in water from Lovegrove Street, and from the Surrey Canal; and, lastly, in drinking water from the Workhouse at Stapleton, commonly known by the name of the French Prison, being all places where, at the time the water was obtained, cholera was making dreadful havoc. This led me to examine a great number of specimens of water from healthy quarters; and, although I often found in it a good deal of matter of various kinds, organic and other, in no single instance did I see anything resembling the peculiar bodies in question."

The first meeting of the Microscopic Sub-Committee was held at Dr. Budd's house on the 9th of July, when he furnished the specimens so often adverted to, to Messrs. Brittan and Swayne, while he reserved some of the rice-water fluid for chemical investigation.

Dr. Budd reported that he made very careful microscopic examination of seven different specimens of blood prior to their being subjected to other processes. In not one of these specimens was anything abnormal seen. The appearance of the blood-globules was always natu-

ral, both as to form and other essential characters; and they always assumed a vivid red colour when shaken up with the air. In no instance could he discover any object in the blood foreign to its normal constitution.

Having given this rapid summary of the important investigations which the gentlemen above named have prosecuted, your Sub-Committee have only to present a description of the peculiar choleraic bodies which they have extracted from Mr. Swayne's paper in the *Lancet*.

"These cells vary very much in size and apparent structure during the different stages of their development; the smallest are of the same size as, or even much less than, blood-globules, so that, to show them properly, an object-glass, of high magnifying power, such as one-eighth, one-twelfth, or one-sixteenth of an inch, is required. They are very transparent, and, like blood-discs, appear to be flattened cells, but the thickness of their walls causes them to resemble rings in appearance. Their interior is almost entirely destitute of granules. Their walls refract light powerfully; they sometimes present a dotted or even cellular appearance, and there is usually a transverse fissure or crack at some point of their circumference. In some of them I have observed very minute cells or buds, projecting at different points of their circumference. Fragments of them present the appearance of small segments of circles. Cells of such dimensions are most usually found in the first portions of the alimentary canal, especially in the matters ejected by vomiting. (*Cut II.—Fig. 4.*) I have, however, found them present in large numbers in the fæces, together with other cholera cells of much larger size. (*Cut I.—Fig. 1—e.*)

"These small cells precisely resemble, and are, in fact, identical in appearance with, those which (*Cut II.—Fig. 2.*) Mr. Brittan has discovered in the atmosphere.

"The medium and larger-sized cells (as usually found in cholera evacuations) distinctly resemble the small cells in appearance, but they are coarser, and more granular in structure. Between the three every gradation may be met with, both as to form and size. The medium cells appear like thick, but somewhat irregular rings; but on altering the focus of the microscope, they can be observed to be flattened cells, with granular contents, and in some cases containing distinct cells within them. Their walls appear thick, and cellular in structure, the arrangement of the cells sometimes giving them the appearance of transverse striae. The walls have usually a great tendency to split at four or five points of their circumference; and when split by gentle pressure, the whole cell divides into four or five segments, and gives exit to its granular contents. (*Cut I.—Fig. 1—c d.*)

"The larger cells (as usually met with) are more irregular in shape, and cellular in structure; they are semi-opaque, of a dirty-yellow colour, and have lost much of their resemblance to rings. On bringing their surface into focus, three or four cracks can usually be seen upon it, which appear deep fissures when viewed in profile. The cell-wall is distinctly cellular in struc-

* See a pamphlet "Malignant Cholera," p. 4, by W. Budd, M.D., &c.

ture. The cell often contains within it other cells of a similar nature. When one of these large cells is crushed by pressure, it breaks into a great number of fragments of a round cellular form. (*Cut I.—Fig. 1—b.*) Sometimes, however, the fragments have an angular character.

"Such are the usual appearances of these cells in the evacuations of cholera, for in by far the greater number of cases they appear flattened, broken, and imperfect. They are collapsed, as if by exosmosis, and more or less disintegrated. It is very probable that this appearance is produced by their having undergone a kind of digestion whilst passing through the alimentary canal.

"A very short time ago I had an opportunity of examining the only perfect specimen of these cells which

I have seen. In one of my earlier examinations I met with a large well-developed cell, but this did not perfectly reveal the structure, and it is only lately that I have seen any which do this. These specimens were obtained from Case 34, and were very beautiful microscopic objects. (*Cut II.—Fig. 1.*) Their walls were thick, and studded externally with numerous cells or buds. These appeared to be arranged in concentric circles. The cells being somewhat globular, the centre is first brought into focus, when it is seen to be occupied by two or three of these buds with intervals between them. (*Cut II.—Fig. 1—c.*) On gradually bringing the rest of the cell into focus, wider and wider circles of these buds are successively displayed, until the outer margin

CUT I.



Fig. 1.—Large and small cells with mucous globules.

a Large cells in the imperfect state in which they are usually found.

b Large cells crushed by pressure.

c Medium-sized cells.

d Medium-sized cells crushed by pressure.

e Small cells from same specimen.

f Mucus, with hyaline basis.

Fig. 2.—Lithate of ammonia and lithic acid from cholera evacuations.

Fig. 4.—Phosphates from ditto.

Fig. 3.—Oxalate of lime from cholera evacuations.

Fig. 5.—Chloride of sodium from ditto.

ring of buds is brought into focus. The cells forming these circles are connected by very distinct concentric lines.

"The parent cell is seen to contain within it a mass of granules, which in an imperfectly-developed cell does not quite fill its interior. On crushing one of the parent cells, it gives exit to its contents, consisting of granular matter, somewhat resembling the most minute cholera cells in appearance. (*Cut II.—Fig. 1—f.*) Well-developed large cells of this kind are usually tolerably transparent, and of a dirty yellow colour."

As a supplement to this account, Mr. Swayne reports that he has observed buds projecting from the external

surface of the cells, and in some instances, completely detached. (*Cut II.—Fig. 1—b.*) This observation suggests that the mode of production may be that of gemmation, as well as endogenous.

JAMES F. BERNARD, Chairman.

J. C. SWAYNE.

FREDERICK BRITTON.

J. A. SWAYNE.

AUGUSTIN PRICHARD.

WM. BUDD.

J. H. SYMONDS, Extraordinary Member.

JOHN CASH NEILD,

Secretary to the Microscopical Sub-Committee.

CUT II.



Fig. 1.—Large cells from cholera evacuations, (Cases 9 and 34.)

a Large cells from Case 9.

b Large cells from case 34.

c Large cells, the centre only in focus.

d Large cells, with rather more of the circumference in focus.

e Large cells not fully developed.

g Small cells, with development of buds externally.

h Broken and imperfect cells from same specimen.

Fig. 2.—Cells from condensed atmosphere.

Fig. 3.—Cells from drinking water.

Fig. 4.—Cells from vomited matter.

Fig. 5.—Cells from drinking water.

RETROSPECTIVE ADDRESS,
 DELIVERED AT THE EIGHTH ANNIVERSARY
 OF THE
 READING PATHOLOGICAL SOCIETY,
 AUGUST 8TH, 1849.

By WILLIAM B. YOUNG, Esq.

- I.—DISEASES OF THE NERVOUS SYSTEM.—*Sanguineous apoplexy; tumour of the cerebellum; cerebral softening; chronic hydrocephalus.*
- II.—DISEASES OF THE RESPIRATORY ORGANS.—*Tuberculosis; pulmonary apoplexy; calcareous concretion of the lung.*
- III.—DISEASES OF THE CIRCULATING SYSTEM.—*Aneurism of the abdominal aorta; enlarged heart.*
- IV.—DISEASES OF THE DIGESTIVE SYSTEM.—*Cholera; dilatation of the colon and rectum; abscess of the liver; intussusception of the intestines; schirrus pylori.*
- V.—DISEASES OF THE REPRODUCTIVE SYSTEM.—*Diseased ovary; ovarian dropsy; fibrous tumour of the uterus.*
- VI.—DISEASES OF THE URINARY SYSTEM.—*Diseased bladder.*
- VII.—DISEASES OF THE SKIN.—*Horny excrescence.*
- VIII.—SURGICAL DISEASES.—*Fractured spine; gunshot wound; injury of the radial artery.*
- IX.—MIDWIFERY.—*Lingering labour, with hydrocephaloid head.*

MR. PRESIDENT AND GENTLEMEN,—It is with feelings of diffidence that I appear before you this evening, to fulfil the task which it has fallen to my lot to perform, viz., to deliver a Retrospective Address of your proceedings during the past year, inasmuch as there are many other members who are better qualified for such an undertaking. At the same time I must confess, that I have derived much pleasure and instruction from a closer perusal of the many interesting papers and cases which have been brought before you since our last anniversary.

We are met together this evening to celebrate the eighth anniversary of the Reading Pathological Society, and in taking a review of its proceedings during the past year, I think we may say, that although there have not been so many papers read as in former years, still, many interesting cases have been brought forward, and much useful information elicited by the discussions which have followed, and especially on the subject of cholera, which, from its importance, has occupied a great portion of our time.

The many advantages of societies of this kind have been so fully stated by those gentlemen who have preceded me, that I need not repeat them; but there is one which I would refer to more particularly at this time, viz., that it gives the members an opportunity of meeting together to discuss the subject of any severe epidemic which may be raging, and so to devise the best means of treating the same.

I have much pleasure in congratulating you on an

increase in our members, five new members having joined this society during the past year; but it is not unmingled with regret, as I have to record the loss of one whom it has pleased God in His Providence to remove from amongst us since our last meeting. I refer to Mr. Dunn, who kindly took charge of the museum since the formation of the Society, and had only lately resigned the office of house-surgeon to the Royal Berkshire Hospital, which he had held for ten years, with great credit to himself, and satisfaction to all connected with it, to enter upon the more anxious duties of private practice.

I shall now proceed to the more immediate object of the meeting, viz., to detail the cases, &c., which have been offered to the Society since our last anniversary, and in so doing, I shall follow the same arrangement as that adopted by my predecessors.

I.—DISEASES OF THE NERVOUS SYSTEM.

Sanguineous Apoplexy.—Mr. Walford related the case of a man who died in St. Lawrence's Workhouse. He had been suffering from a lichenous rash, on the disappearance of which he complained of a pain in the loins, with loss of appetite. On examination the liver was found enlarged; the urine became bloody, afterwards pale and albuminous, with a specific gravity of 1007.

On the 13th of July, the nurse hearing an unusual noise, went to him, and found him speechless. He died in a quarter of an hour.

On a *post-mortem* the following appearances presented themselves:—*Lungs* adherent from old effusions of lymph. *Heart* small and fatty, with slight thickening of the mitral valve. *Liver* twice its natural size, and hard. *Kidneys* large, the cortical substance being more distinct and harder than natural. On examining the brain a large quantity of blood was found effused and coagulated round the pons varolii and medulla oblongata, and extending into the spinal canal of the third ventricle.

Mr. Walford considered that the effusion on the brain might fairly be ascribed to the disease of the kidneys, and faulty secretion of urine. In the discussion which followed, Mr. May said, that when the specific gravity of the urine was below 1007 we might fairly assume that there is an absence of urea, and where this continues for any length of time it is invariably followed by apoplexy, either sanguineous or congestive. Dr. Cowan did not think there was any connection between the state of the urine and bloody effusion, which he considered accidental.

Tumour of the Cerebellum.—Dr. Cowan presented a tumour taken from the cerebellum of a girl, aged 18, who came into the Royal Berkshire Hospital, suffering from a severe pain at the back of the head, which came on in paroxysms. The head was drawn more or less towards the left shoulder. Her general aspect was anæmic. There was no affection of the sensorium, delirium, or paralysis. She derived temporary relief from the application of leeches to the nostrils and

behind the ears. In three or four days she relapsed and died suddenly.

On examination, the hemispheres of the cerebellum were found dry, but perfectly sound. On cutting into it a tumour was discovered in each lobe, about the size of a walnut, of the character of medullary sarcoma.

In his remarks upon this case, Dr. Cowan stated that this was the third case of the kind which had occurred to him. The other two had proceeded farther, and presented a greater complication of symptoms. He also remarked, that during the paroxysms of pain there was great unsteadiness of gait, which went off when that ceased, and that it was curious how much the symptoms produced by this permanent lesion were relieved by the remedies and slight depletion.

Cerebral Softening.—Dr. Wells read a case of cerebral disease, with softening of the fornix and septum lucidum, which appeared to follow a severe nervous fever, which occurred in 1845. This interesting case, and the valuable remarks of the writer, has appeared in the *Medical Gazette*, January 19th, 1849.

Chronic Hydrocephalus.—Mr. Harrinson related the case of a child, aged 9 years, who died of chronic hydrocephalus, with caries of the temporal bone, which appeared to follow an attack of measles. She suffered from severe pain behind the left ear, followed by a discharge, which continued for some time. A short time after a swelling formed behind the ear, which became very large, and was opened, from which a very offensive discharge continued to flow profusely. During this time the child was convulsed, very restless, feverish, and refused the breast; the bowels confined, urine scanty, and very offensive. On examination a large fungous ulcer was seen over the mastoid process, and on passing a probe the bone was found bare. Much restlessness and other symptoms of cerebral irritation succeeded, and ultimately convulsions, coma, and death.

On a *post-mortem* examination the bone around the meatus externus was found carious to some extent, but there was no appearance of disease of the petrous portion of the temporal bone, or trace of inflammation of the membranes or brain, or of caries internally. There was at least a pint and a half of fluid in the ventricles, and the surrounding brain was in a state of diffuence. A yellow gelatinous fluid lined the base of the brain. There were all the appearances of chronic hydrocephalus.

In commenting upon this case, Mr. Harrinson came to the conclusion that the hydrocephalus and caries were the effects of a general condition, induced by the immediately-preceding attack of measles.

II.—DISEASES OF THE RESPIRATORY ORGANS.

We next come to the diseases of the respiratory organs.

Tuberculosis.—Dr. Woodhouse read the case of a young lady, aged 22, who, up to the period of the sudden advent of the disease had always enjoyed good health. The disease was very obscure in its commencement,

resembling simple continued fever for a long period. The chest symptoms were at first very slight, then entirely ceasing, and exhibiting no physical signs whatever, till within a few days of her decease.

Autopsy thirty-six hours after death.—Body generally emaciated. *Head:* Scalp dry and bloodless; cranium thin; calvarium rather strongly adherent; dura mater slightly congested; the membranes at the base of the brain thick and opaque, and covered by a recent deposit of lymph, involving the origin of the nerves; a rather firm yellow granular deposit was found in the course of the large vessels in the fissura Sylvii, removable with the membranes, and leaving the substance of the brain untouched, which was softer than in other parts; the cerebellum presented throughout a series of small yellow points, resembling miliary tubercles; on removing the thickened membranes from the base, the pyramidal and olivary bodies were found softened, and the medulla less consistent than normal; the pons appeared natural externally, but on cutting into it, three or four points of tubercular deposit were found; a single point was also found in the left olivary body and the right crus cerebelli; the hemispheres presented similar points of tubercular deposit equally distributed throughout their substance. *Chest and abdomen:* The chest presented externally the malformation called pigeon-breast; sternum prominent; and ribs flattened anteriorly. On raising the sternum the lungs did not collapse. Old adhesions were found on the posterior part of the right inferior lobe. The substance of the lungs densely studded with miliary tubercles, especially in the upper lobes. Heart healthy. Liver gorged with blood, but otherwise healthy. Intestines natural.

The chief points of interest in this case were, its insidious approach, short duration, and the extent of recent tubercular deposit found in the brain and lungs, for in the former it was not merely confined to the meninges, but pervaded also the whole cortical and medullary portions, and this with so little disturbance of the intellect till within ten or twelve days of her death. The total duration of the disease was sixty-two days. No hereditary taint could be traced.

Pulmonary apoplexy.—Mr. Walford presented a morbid specimen taken from Edward Weller, aged 29, who died from pulmonary apoplexy, consequent upon an attack of pneumonia while suffering from an enlargement of the heart.

Post-mortem.—The heart was generally enlarged; valves of the aorta thickened, with effusion into the pericardium; there was also an extensive effusion of blood into the tissue of the right lung, so that when it was sliced a distinct line of demarcation existed between the portions of the tissue into which it was effused and the other parts; it presented a black appearance, and broke down easily under slight pressure. The adjoining portions indicated pneumonia. *Abdomen:* Liver large, hard, and presenting the appearance of a nutmeg when sliced. Extremities oedematous. Integuments subjaundiced.

This case is interesting, inasmuch as it shows the danger there is of a fatal termination when an individual with an enlarged heart becomes affected with pneumonia, from the increased liability to sanguineous effusion, or, in other words, pulmonary apoplexy.

Calcareous concretion of the lung.—Mr. Harrinson presented a small concretion which was expectorated by a girl who, when an infant, had inflammation of the lungs. One side of the chest was contracted. She is now a fine girl, and has coughed up five or six concretions at different times.

In his remarks, Mr. Harrinson stated that these concretions are classed by writers under two heads, viz., those produced by simple inflammation, which are either calcareous or osseous; and those by tubercular inflammation, which are amorphous or calcareous, and combined with animal matter. The mother died of phthisis, wherefore Mr. Harrinson was disposed to think it originated from the latter cause, and that she would ultimately become consumptive.

Dr. Cowan did not coincide with Mr. Harrinson, but thought they were formed in the mucous crypts of the tonsils or the bronchial glands, as depicted in Carswell's plates.

(To be continued.)

BIRMINGHAM PATHOLOGICAL SOCIETY.*

MAY 3RD, 1849.

MR. RUSSELL IN THE CHAIR.

The heart of a patient who died suddenly, after frequent paroxysms of angina pectoris for about ten days before his death.

Dr. Fletcher narrated the following particulars of the case:—

The heart was generally and equally dilated in all its cavities, without increase of thickness of its parietes, to about half above its normal size, with its walls thinned, so much that the heart would not exceed its normal weight, forming a case of dilatation of the heart without hypertrophy. Its valves were all perfectly healthy in their organization, but partook of the dilatation of the organ; and the chordæ tendinæ of the mitral and tricuspid valves were elongated. The muscular structure of the walls of the ventricles and of the columnæ carneæ was generally paler than natural. On the right side of the heart there was considerable fatty deposit; externally, and in the lower half of the left ventricle, there was considerable fatty degeneration, with softening and disorganization of the muscular structure; and the muscoli pectinati of this region were softened and destroyed. Portions taken from this part shewed none of the transverse striæ under the microscope which appear in the normal state, and which were sufficiently visible in portions taken from the base of the heart. The left coronary artery appeared healthy in its structure, about the normal size in the first part of its course, but

contracted afterwards. The right coronary was very large and wide, and patent at its origin, and dilated for about three inches of its course, where its coats became diseased, and afterwards its calibre was very much contracted. The veins of the heart were generally dilated, and more so into sinuses than usual at the base. The structure of the left ventricle was so extremely diseased at the lower portion, that it must have been incapable of much contraction; and here its internal surface was much softened and disorganized, and it contained a clot, firm and fibrinous, such as is found in an aneurismal sac, of about half an ounce in weight.

Dr. Fletcher was called to see Mr. A. B., (with Mr. Frederick Jakes) on the 15th of April, 1849. He was a thin, nervous man, aged 44, active in business. He had been ill since the day before, when Mr. Jakes first saw him, having frequent attacks of pains across the chest, which extended through to the back, and slightly into the arms, attended with palpitations and sensation of suffocation, and during the intermissions he was quite free from all inconvenience. He examined him very carefully, and could detect no physical signs of disease, either in the heart or arteries, or in the lungs, or in any other viscera; the only thing upon which he made any remark was, that the sounds of the heart were slightly sharper and clearer than natural, but this was not to such an extent as to have drawn his attention in a patient who did not complain of any symptoms of affection of the heart. The pulse was 73 or 74, and perfectly natural.

Mr. Jakes had known him twelve years, and had never seen him more out of health than occasionally suffering from colds, attended with a cough, which in some cases was rather obstinate. About twelve months ago Dr. Fletcher examined him with Mr. Jakes, when he was in some degree anxious about himself, but for no other cause than the obstinacy of his cough; and his father having been the subject of asthma, he thought he might become so, or consumptive. He then examined him very carefully, and detected nothing more than a slightly coated state of the tongue, which he supposed originated in indigestion, and prescribed some slightly aperient pills, and a mixture, containing infusion of gentian and alkalies, to which he has occasionally had recourse ever since. Dr. Fletcher was about to leave his room to talk over the case with Mr. Jakes, when he told us that one of his attacks was coming on, and immediately there was great anxiety of the countenance, and he appeared to suffer great pain and sense of suffocation, and the heart's action became frightfully irregular, it seemed to toss and tumble on every side, with the most irregular jerking contractions, both as to force, space of interval, and situation; you might fancy the heart assuming all sorts of positions, upside down, sideways, back again, without law or order, and contracting with the utmost irregularity, both as to force and interval, the pulse at the wrist during this time beating most irregularly, and not at all corresponding to any contractions of the heart. When this most inordinate action began to subside, the heart beat for some time as follows:—(The spaces between the numbers represent the spaces between the pulsations or sounds of the heart.)—1—2—3—4—1—2—3—4; and at this time the pulse at the wrist was only felt at the No. 1 sound of the heart, of which there were

* Continued from page 577.

about 60 per minute, but with this it was constant. The attack lasted about five minutes before it quite went off, and he was then perfectly regular, both in respiration and circulation.

April 17th.—Dr. Fletcher again visited the patient with Mr. Jakes. The character of the pains during the attacks had now altered, they were felt through the back and scapulae, and through the forehead so intensely, that Mr. Jakes had thought it necessary to apply leeches to the temples. The heart's action was quicker, and more laborious; the lungs somewhat congested; and the surface of the body generally was so congested, that the hand or finger placed upon the surface of the body readily left its mark. About twelve ounces of blood were taken from the arm, to relieve the heart and the general congestion, and the treatment continued.

From this time Mr. Jakes reports that he continued in somewhat the same way, the attacks came on with about the same frequency, but were slighter, and on the 22nd he appeared much better, sat up, and enjoyed his dinner. About half-past five of the morning of the 23rd he died suddenly, whilst sitting up to take some tea.

Post-mortem examination fifty hours after death.—Body thin, not decomposed. Head not permitted to be examined. *Chest*: Lungs congested posteriorly, and very slightly emphysematous; in their anterior borders they overlapped the heart, so as to leave very little of it in approximation with the parietes of the chest. Heart as already described. No effusion in the pericardium or pleurae. *Abdomen*: liver, spleen, and pancreas, and the vascular system of the intestines, congested; kidneys congested. All these organs otherwise healthy.

Remarks by Dr. Fletcher.—I have gone into details in this case more than perhaps may appear its due: but when we consider that these severe paroxysms came on, and a fatal disease existed in a part without permanent symptoms of its existence, so that in the early stage of his sufferings there were no physical signs of disease during the intermission between the paroxysms; and when we consider also that in this case a policy of insurance upon his life was actually effected after a careful medical examination within six weeks of his death, it must be evident that the case demands more care and more detail than even at present I have inflicted upon you.

Granular disease of both kidneys in a woman advanced in pregnancy, with constriction of the left auriculo-ventricular orifice, and sanguineous condensation of lungs.

Mr. Mackay gave the following history of the case:—

Mrs. Freeman, of dark complexion, moderate stoutness, and until within the last few months generally of good health, is in the ninth month of her second pregnancy, and admitted into the Lying-in Hospital on account of general anasarca, with much pulmonic and cardiac disturbance. Four months past had an alarming attack of hæmoptysis, said to have been caused by a severe beating, and about the same time anasarca

showed itself, first in the feet and legs, and subsequently in the trunk, upper extremities, and face. Has suffered much from dyspnoea and cough since the hæmoptysis; both continued, with violent cardiac impulse, some dulness over the region of the heart, and a strong bruit with the first sound. The urine of a dark colour, like the grounds of tea, with little black particles at the bottom of the vessel; specific gravity, 1030. The quantity, about five ounces, is converted, by boiling, into an opaque jelly. For the first few days she improved, but then relapsed, and for the first time experienced headache and vertigo, which were attended by an evident increase in the frequency and fullness of the pulse, and an aggravation of the pulmonic and cardiac symptoms. At this stage general bleeding was resorted to, with great relief, and subsequently topical bleedings, counter-irritation, aperients, and mild diuretics were employed, with decided effect. The sthenic condition of the system being reduced, opium, in the form of Dover's powders, was of great service in relieving irritation and procuring sleep. Three weeks from her admission labour came on, and after three hours' duration terminated in the birth of a mature male infant, which was still-born, but had evidently not long ceased to live. No change of importance occurred either in the general or local symptoms subsequently, excepting that the anasarca for some days abated, and the abdomen became distended with fluid; but in the last fortnight of her life the former returned, and before her death became extreme. The urine was very frequently examined, and was always highly albuminous. It occasionally varied in quantity and specific gravity, but generally was, in both respects, as on admission. Five weeks from the date of her delivery she sunk from exhaustion, having neither had convulsions nor coma.

Post-mortem thirty hours after death.—Head not examined. *Thorax*: Lungs not collapsed; filled their respective cavities; of normal colour; but in considerable portions of each there was great condensation of the parenchyma, as felt by the finger; and when incised, this induration was found to arise from effusion of blood, which in some parts was in patches, having a distinct outline. About eight ounces of bloody serum were contained in each pleural cavity. In the pericardium there were about six ounces of clear fluid, and on the anterior surface of the heart there were two small patches of soft lymph. On examining the cardiac structure some hypertrophy of the left ventricular walls was evident, and also great narrowing of the left auriculo-ventricular orifice, from contraction of the mitral valve. *Abdomen*: The liver was somewhat enlarged; a considerable quantity of an albuminous fluid in the peritoneal cavity. The kidneys exhibited the usual characteristics of granular degeneration in a marked, though not in an advanced, degree. They each exceeded the average size of the organ. Their capsules separated without difficulty. On making a section of them the difference in appearance between the cortical and tubular structure was very striking, the former being of a pale straw colour, and very smooth, the tubular part preserving its natural colour. The portions of cortical tissue between the tubes was much developed, and beginning to encroach on them.

Strumous tumour in the left lobe of the cerebellum.

Mr. Mackay gave the following particulars of the case:—

— Williams, aged 5 years; generally was pretty well, though never a strong child; has not had any illness or any nervous affection. She appeared in her usual health when she went to play with some neighbouring children. About six P.M. on the day of the attack, after amusing herself for some time in running round a circle with her companions, she suddenly fell down and became evidently convulsed. She was taken home directly, the usual remedies were employed, but without any effect upon her. The convulsion, which was universal, alternated with profound coma up to her death, which took place at three A.M. next morning.

Post-mortem thirty-six hours after death.—*Head:* Some congestion of the superficial vessels. The cerebral structure appeared healthy, excepting the left lobe of the cerebellum, which was the seat of a tumour, the size of a filbert. The tumour felt much firmer than the cerebral substance, and the portion of the latter contiguous with the tumour was very vascular, and evidently softer than usual. On cutting through the tumour it exhibited a cheesy appearance and consistence. All the other organs of the body were healthy.

Lungs enormously emphysematous; tricuspid orifice of the heart slightly dilated; from an old man who died of sloughing after the operation for strangulated hernia.

Dr. Heslop related the particulars of the case:—

The patient had been recently operated upon for oblique inguinal hernia, by Mr. Crompton, by whose permission Dr. Heslop was enabled to bring the specimens before the Society. The lungs exhibited a truly extraordinary amount of emphysema, immense bullæ being spread over every part of them, but over the inferior surface more especially. They were undoubtedly nearly three times their natural dimensions. The heart was not larger than usual, and presented nothing remarkable, but a slight enlargement of the tricuspid orifice. This man died of erysipelas a week or ten days after the operation. He was not afflicted with dropsy, nor with any marked thoracic symptoms. His age was 74; had been a drunkard for many years.

Dr. Heslop refrained from giving an account of the abdominal organs, because he believed that they were to be brought before the Society on a future occasion, in connection with the disease of which he died. But he must remark upon the enormously diseased state of the respiratory organs in this case—not portrayed during life by any marked effects—but which had begun to produce a retrograde (he believed *characteristic*) effect upon the right side of the heart. Supposing a slight bronchitis had occurred in this man, how rapidly must venous distention and anasarca have occurred, the veins already suffering from increased pressure on their walls from disorder of the central respiratory and circulatory organs.

Perforating ulcer of the bladder, communicating with the vagina; granular disease of the kidneys.

Mr. Hinds narrated the following case:—

Mary Jackson, aged 40, has had two children; has had ill health during two years; her illness commenced with a severe pain in the loins, which has continued more or less ever since.

In the early part of 1848 she applied to me on account of a vaginal discharge, then regarded as leucorrhœa. She assured me she had not had any venereal affection. I saw her six or eight times, when she became better.

In September, 1848, she again applied to me, and appeared to be labouring under granular disease of the kidney, such at least was inferred from the general symptoms; but the urine, several times examined, did not appear to contain any appreciable amount of albumen when examined by heat and nitric acid. She afterwards placed herself under the care of Mr. John Carter, at the dispensary.

On March 6th, 1849, she again came under my care, and, beside kidney affection, she was believed to be labouring under chronic disease of the bladder. Tenderness over the pelvic region, constant desire to pass urine, this desire troubling her every five minutes. Urine foetid and ammoniacal, and contained a mucopuriform matter, and a large amount of phosphates.

March 29th.—Her urine came away involuntarily. She died April 1st.

The *post-mortem* examination, made in the presence of Mr. John Carter, revealed extensive granular degeneration of both kidneys; and on the posterior surface of the bladder, a little below the fundus, a fistulous opening existed, about the size of a sixpence, communicating with the vagina; the margins were sloughy. The mucous membrane of the bladder was generally thickened, as well as corrugated, and the muscular coat very much hypertrophied. The capacity of the bladder much diminished.

Foreign Department.

Cholera in the Salpêtrière.

Our readers will remember that in the hospital of the Salpêtrière the cholera exerted a more fatal influence than in any other establishment in Paris. This was attributed greatly to the character of the patients attacked, for the most part feeble, together with aged females, who form the bulk of the establishment, and some lunatics. The history of the epidemic, as it appeared in this locality, has been copiously illustrated by M. Barth, in a communication to the *Archives Générales*, of which we give the following analysis:—

The first case of the disease occurred on the 14th of March; the last on the 29th of April. During this period of six weeks there were more than 800 cases, out of a population of 5,340. In the majority of cases at the first commencement of the disease, it occurred as a complication of some existing malady, as pneumonia, bronchial catarrh, measles, rheumatism, &c. It was

generally preceded by diarrhoea, the duration of which was observed to be proportionate to the severity of the attack, being the longest in the manageable, and very brief in the fatal, cases. The author distinguished two forms of premonitory purging, one consisting of liquid feculent stools, the other of copious and more frequent watery evacuations. The latter he considers as an essentially choleraic.

This diarrhoea was the first symptom in a large majority of cases; in others vomiting and cramps appeared simultaneously with it. In 117 cases in which the mode of invasion was accurately noticed, cramp was the first symptom in only one instance, and vomiting in only two.

Diarrhoea was not only the first, but also the most constant, symptom; the character of the evacuations varied, but were in general aqueous, and exhaled a faint blood-like odour. Under the microscope a large number of animalcules were sometimes seen.

Vomiting was also a common symptom, and much more so in the fatal than in the cases which recovered. In the former it was absent in only four per cent.

Cramp was absent in only three or four per cent. of the cases, but exhibited a great variation in its intensity. Its usual seat was in the lower extremities.

Coldness of the surface was almost an universal phenomenon, and was observed in all degrees, from a slight partial depression of temperature to a corpse-like frigidity. In many cases the patient was not sensible of this, but on the contrary complained of burning heat, and continually threw off the bed clothes. The cases in which this coldness was very pronounced were generally fatal.

Cyanosis was observed in all the collapsed cases, and seemed to be exactly in relation to the degree of coldness.

Failure of the radial pulse was an universal symptom, varying from slight depression to complete extinction.

The voice seldom preserved its natural intonation; in fatal cases it was invariably greatly altered.

Suppression of urine, in those cases in which trustworthy answers could be obtained, was observed more or less complete, and was proportionate to the amount of intestinal discharges.

In the course of further general remarks on the disease, the author states that he was enabled to recognise three groups of cases. In the first there was diarrhoea, slight vomiting, and cramp, and failure, without extinction of pulse. Another and fatal form was characterised by frequent rice-water evacuations, violent cramp, icy coldness, and complete collapse. Intermediate between the moderate and severe type he observed a third.

Independently also of intensity, he noticed that in some cases the malignancy of the poison appeared to be expended in the intestinal canal, while in others the nervous system seemed to be chiefly implicated. Reaction was facile in proportion to the youth of the patient. In a third of those in which it ensued it became excessive, merging into what has been termed the consecutive fever. A fourth of the fatal cases were lost in this stage.

Among the less frequent complications of the disease were observed severe tetanic rigidity, various cutaneous eruptions, and a diphtheritic state of the fauces.

The duration was much modified by the occurrence of the above complications. In the fatal cases the duration varied from a few hours to twelve days; in the successful ones from two days to three weeks. The mean duration in the former case was three days; in the latter six.

The principles of treatment which the author considers to arise out of a careful comparison of symptoms and pathological lesions, are:—To maintain or re-establish the capillary circulation; to preserve the heat of the surface by friction and external heat; to suspend the exaggerated action of the exhalents, and to calm the nervous excitement. In a mild case it suffices to place the patient in a warm bed, allow warm drinks, and exhibit starch and laudanum injections. If the case is more urgent, he applies the hot-air bath, and adds some alcoholic stimulant to the warm drinks. Seltzer water, and acetate of ammonia, largely diluted, was allowed as a beverage. The cramps were treated by the external use of chloroform.

Among the empirical remedies made use of, the author names the sulfite of ammonia, the stachys analotica, cannabis indica, and common salt. From none of these did he derive any striking benefit.

The medicine from which the author perceived the greatest advantage, was nitrate of silver, internally and by injection. This he assures us was frequently followed by amendment, even in the severest form of the disease.

Certain symptoms were met with an appropriate treatment—as the vomiting—by ice, creosote, &c.; the cramps by chloroform.

Reaction, when excessive, was moderated by blood-letting, purgatives, sinapisms, &c. Calomel does not appear to have been given in any case.

The degree of success which attended the various modes of treatment, is stated to be as follows:—

Common salt was given in twenty cases, fourteen of which were aged women. Of these, fifteen died, five recovered. Common salt was given both by the mouth and by enema.

The *nitrate of silver* was exhibited in fifty-three cases, twenty-seven of which recovered. The principal effect appeared to be that of moderating the secretions, the diarrhoea being often checked in eight or ten hours. No inconvenience arose from the use of this medicine.

In his recapitulation of the diverse modes of treatment submitted to the test of practice, the author decides in favour of this latter, which he believes will prove to be one of the most effectual remedies for cholera.

Method of Arresting the Vomiting in the First Stages of Cholera.

Dr. Cazeu, an eminent physician of Boulogne, has used with constant success the application of volatile alkali, or liquid ammonia, on the pit of the stomach; a piece of brown paper saturated with ammonia is placed

in a watch glass, and applied to the pit of the stomach, so as to produce a blister; this is effected in a few minutes. The skin having been removed, a quarter of a grain of acetate or hydrochlorate of morphine is then placed on the spot: the vomiting ceases almost immediately.—*Medical Gazette*.

General Retrospect.

PHYSIOLOGY.

The Choleraic Fungi.

[We subjoin a few additional observations respecting the fungus theory of cholera, by which it will be seen that considerable doubt exists of its accuracy.]

The little annular bodies discovered in the dejections of cholera by Messrs. Brittan and Swayne, have been stated by Mr. Grove to undergo a further development by the production of buds, or cells, which subsequently become converted into long jointed filaments, somewhat similar to the torula or yeast plant.—*Lancet*, October 20.

The probability of these bodies being the cause of cholera is doubted by Dr. Parker, of the London Hospital, who has contributed an interesting retrospect of recorded discoveries of vegetable parasites in various animal tissues.—*Medical Gazette*, October 19.

Dr. Basham has discovered the same bodies in the urine of a dyspeptic patient, and has ascertained, moreover, that, in certain cases at least, they do not make their appearance in the cholera dejections until some hours after they have been passed. [Both these observations are fatal to the fungoid theory.]—*Ib*.

Mr. Busk, the President of the *Microscopical Society*, made an important communication to the Society on Wednesday evening last, relative to the nature of the bodies detected by Mr. Brittan and Mr. Swayne, in the cholera evacuations. He demonstrated that the large bodies, figured by Mr. Swayne are nothing more than a species of *uredo*, a kind of smut frequently present on wheat, and specimens of which Mr. Busk found in a loaf of brown bread purchased in Greenwich. The *uredo* is not destroyed, even by the action of caustic potash, and it readily passes unaltered through the intestinal tract. The smaller, so called annular bodies, are not, according to Mr. Busk, sporules in an earlier stage of development than the larger bodies (*uredo*), but are evidently starchy granules, derived from the bread eaten by the patients.

In addition to the *uredo* and the starchy granules, Mr. Busk demonstrated, in a specimen of cholera evacuation supplied by Mr. Swayne, the cellular structure of the inner coat of the bran of wheat.

The identity of the bodies in the cholera evacuation with the *uredo* and the bran of wheat was quite unequivocal, and there appeared every reason to think that the small annular bodies were, as Mr. Busk stated, merely starchy granules, derived from the bread previously eaten.

The *uredo* was present in the specimens of cholera

evacuation supplied by Mr. Swayne, but it was not observed in those exhibited to the Society by Mr. Busk.

[This may be explained by the fact mentioned by Dr. Basham, that the sporules do not appear until the lapse of four hours after the passing of the evacuation.]—*Ed. P. J.*

On Nux Vomica in Impotence and Supermatorrhœa.

By M. DUCLOS.

Incomplete impotence is of far more common occurrence than would be supposed, until many patients have been questioned respecting it. Erections are almost always possible, especially in the morning; but they are soft, incomplete, and insufficient, a certain amount of tension only continuing, and that for a short time. This state may be met with in men even of the strongest make and most robust constitution, in whom the vascular and muscular systems have attained their highest development. In others, in whom these systems and the nervous system are ill-developed, the generative functions are properly exercised; so that the general physical force is no criterion of the special force of these organs. This imperfect condition is as often found in those who have been excessively continent, as in those who have abused the sexual organs; and it is observed just as often in persons whose nervous system is easily excitable, as in those in whom its lesser irritability allows of a predominance of the muscular and vascular systems. Self-pollution may occur either by night or by day, the discharge being either a true or a pseudo-spermatorrhœa.

Accident first led the author to the employment of nux vomica in this class of affections; and he has since observed several cases in which its efficacy has proved very great. He divides 75 grains of the alcoholic extract into 100 pills. During five days he gives 1 every night; then for other 5 days, 1 morning, 2 night; for other 5 days, 2 night and morning; and for other 5 days, 2 morning and 3 at night; and so on until 4 are taken night and morning. He has never found any harm result, although some patients have taken 14 pills per diem. In many cases the stomach is rapidly improved by the medicine, the lost appetite returning. The following liniment rubbed into the loins and on the inside of the thighs is a valuable though not an essential auxilliary:—*R. Træ. Nuc. Vom., Træ. Arnicæ vel Melissæ, aa, 60 p. Tr. Lyttæ 15 p.* The regimen should be tonic; and the increased appetite demands a larger supply of food. A very moderate use of coitus is advisable.—*Bull. de Thérap.* tom. xxxvi, pp. 529-33, and *British and Foreign Med. Chir. Rev.*, Oct., 1849.

[We have many times tried strychnine, in these lamentable cases, as well as ergot, but without special benefit; on the other hand, we find the amendment from cauterization is so constant and complete, that we seldom resort to any other measures.]—*Ed. P. J.*

Treatment of Gonorrhœa by Vinum Colchici.

Two years since Dr. Eisenmaun, in *Casper's Wochenschrift*, recommended the employment of the wine of the seeds of colchicum in gonorrhœa. Dr. Froinus, in a recent memoir, has published six cases

in which the method has been entirely successful at different stages of the disease. His formula is—

Vin. Colchici. Sem. dr. iij.
Tinct. Opii m. x.

The dose is from twenty-five to thirty drops three times a day. The mean duration of the treatment is a week.—*Revue Medico-Chirurgicale*, Août, 1849.

MEDICAL FEES AT CORONER'S INQUESTS.

ROMANS "But is this law?"

Ay, marry, is't crowner's-quest law?"—*Hamlet*.

To the Editor of the *Provincial Medical and Surgical Journal*.

SIR,—Having been refused a fee by the coroner of this borough, (John Blackburn, Esq.,) for performing a chemical analysis on the contents of the stomach of a man, who died from arsenical poisoning, I deem the circumstance so important to the profession, that I make no apology for troubling you with the following brief abstract of the case and the proceedings, which took place at, and subsequent to, the coroner's inquest:—

On the 14th of May last, about half-past eight A.M., I was desired to see John Lambert, who had, it was stated, taken poison. On arriving almost immediately at the house, I found the patient labouring under such symptoms as would be caused by a large dose of arsenic, and was informed he had taken what was supposed to be that mineral about five o'clock the same morning. He was then approaching a comatose state, and there had been much vomiting and some purging. As the import of my communication depends neither on the history of the case nor its treatment, I need only further observe that the patient died comatose a short time before eleven A.M., or something less than six hours after taking the poison. An inquest was held upon the body the same day, when it was proved that deceased had been in a desponding way for some time, and that he had had arsenic in his possession for some months. I stated in evidence, that the symptoms I had observed were such as might have been caused by a large dose of arsenic, and that it was probable death was caused thereby, and was not the result of disease; but I did not feel justified (in answer to a question from the coroner) in saying I had "no reasonable doubt" that this was the case. The jury seemed disposed to return a general verdict, that deceased had died from poison; but to this the coroner demurred, observing that the specific poison must be named in the verdict; and as I still declined saying I had "no reasonable doubt," although the question was a second time put to me, the inquest was adjourned until Thursday, the 17th, in order that I might make on analysis of the matters vomited, and should I not find poison therein, I was then to examine the body and pursue my investigation in the usual manner.

As it never once occurred to my mind, that the usual fee (A) for an analysis (in addition to that for attending the inquest,) would be withheld, I did not ask the coroner for a formal order—especially as he had stated to the

jury that he did not suppose I should make an analysis for my own amusement—but proceeded at once to the investigation, and at the adjourned inquest stated, in evidence, that I had found arsenic in the matters vomited, and to the coroner, at his request, the processes I had used for its detection. A verdict was immediately returned, in effect, that the deceased had destroyed himself by arsenic, whilst labouring under temporary insanity.

The coroner then paid me a guinea, and on my remonstrating with him for not being remunerated for the analysis also, he referred me to the Act of Parliament, which, according to his statement, gives a coroner no authority to pay a surgeon for making an analysis, unless a *post-mortem* examination be made at the same time; and that, strictly, the act only allowed three shillings and sixpence to a chemist, not medical, for making (B) an analysis; although he always rewarded such chemist's labour with a guinea, and no objection was made to such an item in his accounts by the Town Council. (C.) On observing that I might have declined making an analysis, and then that a chemist would have been employed, who would have received the fee which was withheld from me, Mr. Blackburn replied, that if my evidence was not full and satisfactory he had the power of withholding my fee. I have no access to the Act of Parliament, but as I have no reason to doubt this gentleman's veracity, I think it only an act of courtesy to the profession to make the case public, lest other members should be so simple as to undertake such a responsibility and give at least a day's time to the public under the impression that they would receive some remuneration therefor; and as it is beyond my understanding how the law should allow a coroner to pay a chemist, and justify him in denying a fee to a medical man, for the same service rendered to the community, perhaps you, Sir, will indulge your readers, who must be generally interested in this question, with some editorial remarks thereupon.

I am, Sir, your obedient servant,

SAMUEL RADCLIFFE.

Leeds, September 28, 1849.

A copy of this communication was forwarded to the coroner with the following note, in answer to which I received the letter marked No. 1.

Sir,—At the termination of the inquest which you lately held upon the body of John Lambert, I expressed my intention of sending an account of the case, together with such comments as I deemed necessary, to one of the medical periodicals, and I now enclose a copy thereof for your perusal, in order that any observation you may think it desirable to make, may appear at the same time; and also, that if I have been inaccurate in any part of my statement, you may have an opportunity of correcting me. It is my intention to send off the communication towards the latter end of the week, by which time, if I do not hear from you, I shall infer that you have no remarks to offer.

I am, Sir, your obedient servant,

SAM. RADCLIFFE.

J. Blackburn, Esq., Coroner for the borough of Leeds.

(No. 1.)

Dear Sir,—I cannot have any objections to your writing a letter to any of the medical periodicals, more particularly as the draft sent appears to have afforded you the pleasurable opportunity of bringing into derision and contempt "Crown's-quest law." I mentioned to you at the close of the inquest, that my impression was, I had not the power to pay a fee to a surgeon for making an analysis in addition to his fee for medical evidence, where there was no *post-mortem*. My impression is still the same. I do not recollect having had a similar case. As regards a chemist, there certainly is no Act of Parliament giving me the power to pay a fee specifically for an analysis; but I am empowered by the Council to pay, and always do pay Mr. West one guinea. In this state of things I do not see the justice of withholding a similar payment to you, because where West is employed, I have also to pay the usual fee to the medical man. At the same time, although I admit the apparent injustice, if my impression is correct, you must find fault with the law, and not with me. I think I mentioned to you that I had not a copy of the Act of Parliament in question, and suggested the probability of your having one, and desired you to look at it. Since then the matter has not crossed my mind, but I will take an early opportunity of procuring a copy of the Act, and that will not only finally determine the point, but if my opinion is correct, it will enable you more satisfactorily to make your statement. I need not at present refer to the numerous errors contained in your letter.

Yours truly,

J. BLACKBURN.

S. Radcliffe, Esq., Surgeon, Leeds.

P.S. You will, no doubt, admit, that I can have no interest in withholding a fee that may be justly due. The only feeling I can possibly have, is to do my duty according to the law and the regulations laid down for my guidance.

To this I sent the following reply, which elicited the note from Mr. Blackburn, marked No. 2; and here it is proper to remark, that the passages in *italics* in my first letter, together with the notes A B C alluded to in No. 2, are by Mr. Blackburn.

Leeds, June 20, 1849

Dear Sir,—Whether any one is "bringing 'Crown's-quest law' into derision and contempt," it is not for me to say; assuredly I have no such desire, but the old quotation came in so pat for my purpose, that I could not resist its introduction. The communication I sent you was written simply because I believed either the law or the Coroner was "stinting me of my sizings," and that, making the case public, might be serviceable to my professional brethren, who will, doubtless, judge correctly between us.

I shall be glad to hear from you as soon as you have satisfied yourself, touching the law in this case made and provided, and also to have the "numerous errors" in my communication pointed out, in order that I may amend them; indeed it was for this purpose that I submitted this paper to your perusal previous to publication, although I believe there is not a single error of

the least importance from beginning to end. I do not perceive that any further comment is necessary at present, and have only to apologise for so long delaying my answer to your note; however, if you will oblige me with an early reply, I promise that no further delay on my part shall occur.

Yours truly,

SAM. RADCLIFFE.

J. S. Blackburn, Esq., Coroner, Leeds.

(No. 2.)

Dear Sir,—I have looked into the Act of Parliament in question, and I find my opinion corroborated. A medical man, attending an inquest, and giving medical testimony, is entitled to a fee of one guinea; for a *post-mortem* and evidence, £2. 2s; but there is no provision for payment for analysis where there is no *post-mortem*. I think this is a hardship. Referring to your letter at the point A, there is no usual fee; at B, I said that the schedule of fees, settled by the Council, in strictness, only allowed me to pay Mr. West for an analysis three shillings and sixpence, as an ordinary witness. That fee some time ago I paid him, but the Council now approves of my paying him a guinea. (c.) This communication is incorrectly stated. I think the whole of your evidence ought to be stated, that the medical world might judge whether you ought to have had any reasonable doubt. I think none existed.

Your's truly,

J. BLACKBURN.

S. Radcliffe, Esq.

I am sure the profession will with myself feel obliged to Mr. Blackburn for his candid statement, and his acknowledgment that the existing law inflicts a hardship on professional men. The case is a peculiar one, and I thought it desirable to give it publicity in as concise a manner as possible; for this purpose I have not detailed either the history or treatment thereof, or the method of analysis adopted, as these did not seem to me to possess any unusual interest. The only point it seems necessary for me further to allude to is, whether the "reasonable doubt" I entertained was based on sound pathological principles; and when it is remembered that I had no personal knowledge whatever of the patient's previous state of health,—that the only noticeable symptoms were vomiting and purging, with collapse, and gradually increasing coma,—that no arsenic whatever was found in the house, and that no *post-mortem* examination had been made, I am still of opinion that I should not have been justified in saying I had "no reasonable doubt" that death was the result of arsenical poisoning.

SAM. RADCLIFFE.

[A case similar to the above is so seldom likely to occur, that it is scarcely desirable to effect an alteration in the existing law, which is, no doubt, as stated by Mr. Blackburn. We do not quite understand how Mr. Radcliffe's doubts were so entirely removed by the result of the analysis, as to render a *post-mortem* examination unnecessary. If the evidence went to prove satisfactorily that the deceased had taken poison, that fact, coupled with the symptoms, would have

satisfied any ordinary mind ; and if no evidence of this kind had been adduced, then it would be necessary to prove, not only that arsenic was found in the basin, but also in the stomach, which would have necessitated an examination of that organ. We have no doubt that the Coroner was influenced by some feeling of this kind, or he might certainly as easily have allowed a guinea to a surgeon as to a chemist for an analysis.—ED. P. J.]

ON CERTIFICATES IN LUNACY.

To the Editor of the Provincial Medical and Surgical Journal.

SIR,—As proprietor of a licensed house for the reception of lunatics, I fully coincide with the views expressed in your editorial remarks in the *Journal* of the 3rd inst.

Many may say, "no doubt, he is an interested party;" yet I think, Sir, you will agree with me when I state, that were the law of lunacy altered, or the existing one rendered in accordance with the views entertained by the Chief Baron, the public would be far greater sufferers than licensed proprietors. Allow me to mention one or two points in which they would be so more particularly.

In the first place I conceive that immense difficulty would be experienced, in order to procure the necessary certificates of admission, because every conscientious medical man would refuse to give his signature, unless he had decided demonstration that the person (no doubt of which there could be,) whose insanity he might be called upon to certify, was dangerous, whereas danger might, and in the majority of cases would, exist; thus many would be precluded the immediate benefits of an asylum, and subjected to the improper restraint of nurses or attendants at home, the greater number of such persons being ignorant of the difficult duties they profess to undertake, added to which would be the almost incessant interference of relatives and friends, adding fuel to the fire. Numerous individuals would be kept at home until violent, or perhaps murderous acts at last compelled their confinement in an asylum, probably for life, four out of every five of whom might have been restored to reason, had proper care and attention been paid to their several cases at the onset of the disease, by placing them in asylums, and thus, I hesitate not to say, that the number of incurables would increase tenfold.

Asylums being strictly visited, abuses cannot exist any length of time, nor can persons be long improperly detained, therefore as the only chance of recovery from insanity is acknowledged by all to consist in its early treatment, every facility ought to be given to admission of the insane, whether dangerous or not. Why prevent persons having recourse to the best mode of treatment in affections of the brain producing insanity, any more than those with affections of the lungs producing cough? Let the former, as well as the latter, adopt the readiest mode of cure. Are not sound brains of as much consequence as sound lungs?

One more remark, viz., the increased expense by attendance upon the insane at home. The usual charge made by out-attendants or nurses is one guinea per

week, exclusive of food, for which sum alone a person could be comfortably maintained, and medically attended, in fact have every requisite in an asylum; whereas at home, in addition to the above sum, a medical man must be paid, and food provided for the patient and attendant, &c., &c., with less likelihood of recovery.

Other reasons might be urged, but I am trespassing upon your columns.

I am, Sir, your obedient servant,

F. W. CASSON.

Field House Asylum, near Hull,

October 16, 1849.

REMUNERATION OF POOR-LAW MEDICAL OFFICERS.

To the Editor of the Provincial Medical and Surgical Journal.

SIR,—I am glad to observe that the Poor-Law Commissioners have published returns of the salaries of the different classes of officers employed in the Poor-Law Unions, with the especial view of ascertaining the proportion which the charges for the education of the poor, and for medical relief, bear to the annual value of real property assessed to the Property and Income Tax.

I trust this inquiry may have the effect of calling the public attention to the deficient remuneration of the Poor-Law Medical Officer.

It appears that the annual sum paid to the 2,680 medical officers employed by the Unions in England and Wales, amounts to £124,580, that is, when divided, to about £49. 9s. each. The relation which the cost of medical relief, and education for the poor, bears to the annual value of the real property assessed to the Property and Income Tax in 1843 being £85,802,735, is that of 28-100ths of a penny in the pound, or, in other words, one farthing and 3-25ths of a farthing in the pound.

Now, Sir, I am constantly hearing from such of my medical brethren employed in Poor-Law Unions whom I am in the habit of meeting, that the remuneration they receive does not do more than cover the expense of their drugs; and after this plain statement of figures, there can be no difficulty in believing the statement. It may be said that they have always the alternative of throwing up a profitless employment; but were the Union Surgeon to seek this kind of redress, the probability is, that some other practitioner would be introduced and supported by the Guardians, to the injury of his private practice.

I trust, however, that when the facts of the case are fairly laid before the public through the medium of these official returns, justice will at length be done to these ill-paid and over-tasked members of our profession.

I am, Sir, your obedient servant,

JAMES MACKNESS, M.D.

Hastings, October 6, 1849.

ON THE USE OF THE SALTS OF SILVER BY THE ALCHEMISTS.

To the Editor of the *Provincial Medical and Surgical Journal*.

SIR,—In your last number you insert two quotations from the *American Medical Journal*, illustrating the use of nitrate of silver in icterus, and of oxide of silver in menorrhagia. Allow me to remind your readers that silver is not a new remedy in such cases, and that Paracelsus and his disciples employed it in a vast variety of forms and combinations, for the cure of many obstinate diseases, accompanied by congestive and nervous disturbance. Thus Mylius,*—a professor, whose strange compendium of divinity, alchemy, and medicine lies before me—on the authority of Paracelsus, asserts of silver “*Virtutes ejus sunt in doloribus cerebri, splenis, hepatis et retentione profluvii*,” Of a medicine which this author calls *præcipitatio Lunæ nona* (oxide of silver,) he says,—“*Quod notabis pro summo secreto, alias curat hydropem, lepram, paralytin, luem venereum, et est particulare rem philosophorum*.” Another preparation of a similar nature he describes as “*Epilepticum præstantissimum* ;” another, “*præstantissimum ad maniam et cerebri affectus maximos*.” This was also a chief medicine in menorrhagia.

The method of preparation is in each case fully given, and I find that many of the multitude of medicines obtained from silver were oxides more or less mixed; some were probably carbonates. Of “*Lunæ calx in aquâ salis tartari*” (Sol. Potassæ, Carb.) my author writes,—“*Fiet egregia solutio, in multis magnisque morbis aliis incurabilibus maximum secretum*.” “*Solutio Lunæ duodecima*” (a carbonate?) valet in dysenteria, peste et vulnere capitis.” It is worthy of observation that the oxide and carbonate of silver, so freely employed by the alchemic physicians, have no tendency to stain the skin. It is curious also that many of their metallic preparations were preserved in sugar, in a manner similar to that now so advantageously adopted. Of “*Oleum Lunæ tertium*” (a sulphate) it is said,—“*Divina hæc est medicina in cerebri, lienis, renum, intestinorum præcipue colicis et uteri doloribus atque omnigenis malis dispositionibus*.” “*Extractio Lunæ decima*” (also a sulphate) “*de quo guttæ v. ad x. exhibentur in aquâ appropriata ut peoniarum noviluniarum et pleniluniarum, et in ipso paroxysmo, sedat ipsum et mirabiliter tollit morbum*.” “*Extractio lunæ sexta*” (an oxide suspended in a terebinthinate) is thus extolled :—“*Hæc tinctura expellit etiam pravos corporis qualitates per poros, absque omni periculo, timore, debilitatione, resolutione aut imbecillitate virium, confortat memoriam ac membra principalia, et spiritus vitales et animales*.”

A chloride of silver was among the vaunted and heroic medicines of those bold empirics, and also a nitrate mixed either with that of lead, or mercury, or

antimony. My excuse for writing this is a conviction founded on my own experience, that it would be useful, if those who possess fit opportunity would test, with our clearer views of pathology, a few of those medications, as originally prepared, by which the alchemists produced such a wonderful revolution in the practice of medicine. They possessed powerful means, and skilfully, because successfully, employed them; and I think we may avoid wasting time in experimenting in chemical therapeutics, by referring to their works, in which their experience is pretty honestly recorded, and which would afford valuable aid in our endeavours to improve upon their practice.

I have the honour to remain, Sir,

Your obedient servant,

Tunbridge Wells,

GEORGE MOORE.

October 20, 1849.

NEW HYPOTHESIS TO ACCOUNT FOR THE PRESENCE OF FUNGOID GROWTHS IN CHOLERA.

To the Editor of the *Provincial Medical and Surgical Journal*.

SIR,—Allow me to offer a suggestion which may possibly account for the presence of minute confervoid growths in cholera evacuations. In the last number of the *British and Foreign Medico-Chirurgical Review* is an abstract of a paper by M. Majendie “*On Sugar in the Animal Economy*.” It is there stated that in certain diseases sugar is found “*in the expectoration, in the matters vomited and passed by stool, and in the sweat, and in large quantities in the cholera evacuations*.” In corroboration of this fact, I may state, that two cases of Asiatic cholera have recently come to my knowledge, in which the urine, when first secreted after a long suppression, (in one case for 59 hours,) was intensely saccharine. May not the fungoid bodies discovered by the Bristol physiologists in the cholera evacuations, and somewhat hastily regarded by them as the cause of cholera, be merely imperfectly-developed or broken-up torulæ,—confervoid vegetations met with in saccharine fluids undergoing the alcoholic fermentation? Dr. Golding Bird states that torulæ occur in urine even when the quantity of sugar is too small to affect its specific gravity. In “*Simons’ Chemistry*” the following description of these growths occurs :—“*If urine containing the smallest proportion of sugar be exposed for a few hours to a temperature above 70°, and a drop taken from the surface be examined under the microscope, numerous very minute ovoid particles will be discovered. In the course of a few hours more they become enlarged and appear as distinct oval vesicles, which rapidly become developed into that species of confervoid vegetation to which the term ‘torulæ,’ has been applied*.” If, then, as M. Majendie states, sugar is found in large quantities in cholera evacuations, it is not unreasonable to suppose that torulæ may be as readily developed in the saccharine intestinal fluid as in saccharine urine. Mr. Swayne states that he several times failed to discover these bodies in the first cholera motions though

* J. D. Mylii opus medico-chymicum, Francofurti, MDCCVII.

they were present in large numbers in the later evacuations. This is quite consistent with the known growth of torulæ, which require a certain time, though short, for their development. It is said that similar bodies have been found in water condensed from the atmosphere of cholera districts. The appearances presented by the lowest forms of confervoid vegetation in their earliest stage of development, so closely resemble each other that one variety might easily be mistaken for another, and as their spores are present and rapidly germinate in every warm and damp apartment, thus producing varieties of mould, it is not surprising that some of these bodies should be found in water condensed from atmosphere in such situations.

If you consider this idea deserving of further investigation, you will oblige me by inserting these remarks in the next number of the Journal.

I remain, Sir, your obedient servant,
FERGUSON BRANSON, M.D.

Sheffield, October 19, 1849.

P.S.—In the *Lancet* for October 20th, Mr. Grove, of Wandsworth, has given four representations of the so-called "choleraic fungi," in different stages of development. They were found by him "in the first urine that was evacuated after the algide stage of cholera was over." The appearances there figured closely resemble "torulæ," and had search been made for it, sugar would doubtless have been found in the urine in which the growths occurred. This statement seems undesignedly, and therefore more forcibly, to corroborate the view taken in the preceding communication.

October 20, 1849.

[We beg to draw the attention of our readers to the date of this letter, from which it will be seen that it was written prior to the publication of those of Drs. Herapath and Quain on the same subject.—Ed. P. J.]

Medical Intelligence.

MICROSCOPIC RESEARCHES AS REGARDS THE CHOLERA.

Dr. Plomley has made some microscopic investigations into the nature of the supposed fungoid bodies found in cholera evacuations, the result of which, we are informed, leads him to consider them, though apparently similar to fungi, to be nothing more than altered or modified epithelium cells, mixed with an unusual quantity of their nuclei and granules.

Epithelium cells are minute sacs of variable shape, inclosing granules and small bodies or germs called nuclei. These cells line the whole of the external and internal surfaces of the body, and they are continually undergoing the process of destruction and renewal. They are the only agents by which the several animal fluids or secretions, both in health and disease, are produced. In health these cells, having performed their office, are thrown off with the different secretions of the body, and in quantities proportionate to the amount of the fluids secreted. In disease, in cholera especially, the same process takes place, but at a much more accelerated rate; the cells are thrown off with the

secretions in enormous quantities, and in consequence of their being arrested in their growth and development from a morbid state of the blood, they are much modified and altered in their character, and under the microscope have the appearance of distinct and peculiar organisms, very similar to the lowest fungi and their sporules.

RAPID BRONCHOTOMY.

M. Chassaingnac, surgeon to the Hôpital Saint Antoine, at Paris, lately stated to the Surgical Society that he performed the operation of tracheotomy on a child affected with croup, in the following expeditious manner:—The larynx was steadied by thrusting a tenaculum through the cricoid membrane and the skin; the subjacent tissues and the rings of the trachea were then divided by *one* cut of an ordinary pointed bistoury. The same surgeon advises, when a canula is not immediately at hand, to pass a thread through each lip of the wound, and fasten that thread to a needle thrust through a fold of skin on either side of the trachea.

INTRA-UTERINE CRYING.

It is still a question among accoucheurs whether the fœtus can or cannot utter a cry within the uterus, though we suspect that very few practitioners in this country would lean to the affirmative. Professor Vannoni, however, has just published in a Florence paper, two cases which would tend to establish the possibility of foetal intra-uterine crying. The professor explains the phenomenon by the penetration of some of the air accumulated in the ovum into the trachea of the fœtus.

CHAIR OF MEDICINE AT THE UNIVERSITY OF ST. ANDREWS.

At a meeting of the senatus of the University of St. Andrew's, held on the 9th instant, Dr. George E. Day was unanimously elected to the Chandos professorship of medicine, vacant by the death of the distinguished physiologist, Dr. John Reid.

APPOINTMENTS.

John Miller Blount, M.B., M.R.C.S.E., has been appointed surgeon to the New Jail of the Borough of Birmingham.

On the 17th instant, Dr. D. Lewis, of Finsbury Place, was unanimously elected one of the physicians to the Royal General Dispensary, Aldersgate Street.

Mr. Purnell, of Charter House Square, has been appointed surgeon to the Royal General Dispensary, Aldersgate Street, in the room of Mr. Solly, resigned.

His Royal Highness Prince Albert has been pleased to appoint William Fergusson, Esq., F.R.S., Professor of Surgery in King's College, London, to be Surgeon in Ordinary to his Royal Highness, in the room of Charles A. Key, Esq., deceased.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, October 12th, 1849:—Sampson Kingsford Birch, Canterbury;

John Philip Vander Byl, Cape of Good Hope; William Francis Fryer, Kinsale, co. Cork; Robert Growse, Bildeston, Suffolk; George Campbell Knight, Chaquar Hill, co. Galway; Thomas Henry Mayne, Templemore, Ireland; Frederick George Sadd, London; Robert Tassell, Wye, near Ashford, Kent; James Walker, Alford, Aberdeenshire.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Members on Thursday, October 11th, 1849:—Samuel Brown, Bradford, Yorkshire; Robert Growse, Bidelston, Suffolk; James Harvey Lilley, Wisbeach; William Parry, Montgomeryshire; John Seymour, London.

Gentlemen admitted Members on Thursday, October 18th, 1849:—David Morgan, Llandilo, Carmarthenshire; Josiah Pritchard, Melbourne, Wilts; Hay Sharpley, Louth, Lincolnshire.

OBITUARY.

May 24th, at Adelaide, South Australia, James Tweedale, M.D., Royal Navy.

At Madras, on the 26th of July, at the early age of 31, Joseph Appleton, M.D., late of Greenwich, and formerly Demonstrator of Anatomy at the Webb Street Medical School. After commencing practice at Greenwich, with every prospect of a successful career, the development of pulmonary disease arrested his progress, and he was obliged to dispose of his practice. He then graduated at St. Andrews, and obtained an appointment in the East India Company's service, with the hope of being enabled, in a warmer climate, to continue the practice of a profession to which he was warmly attached, but unfortunately an attack of dysentery put an end to his hopes, by removing him from this world, with the cares and labours of which he was by nature so unfitted to contend.

September 26th, at Inverness, of cholera, Dr. John Nicol,

October 13th, at Alton, Hants, William Curtis, surgeon, in his 30th year.

October 15th, at his residence, No. 7, Norland Place, Notting Hill, Samuel Proctor, Esq., M.D., late of Salisbury Square, Fleet Street, aged 64.

October 16th, aged 25, Ray Charles Golding, M.D., eldest surviving son of Dr. Golding.

October 17th, at 3, Storey's Gate, St. James's Park, John Wright, M.D., aged 44.

October 20th, at Park Terrace, Park Road, Clapham, Edwin Tipple, Esq., aged 65, late of Mitcham, Surrey, surgeon.

BOOKS RECEIVED FOR REVIEW.

Cholera; an Analysis of its Epidemic, Endemic, and Contagious Character, &c. By Henry Stephens, M.R.C.S., &c. London: Renshaw. pp. 47.

Cholera considered Psychologically. By Forbes Winslow, M.D. Churchill. pp. 15.

New York Journal of Medicine, Vol. iii., No. 1.

Malignant Cholera, its Mode of Propagation and Prevention. By W. Budd, M.D., Physician to the Bristol Infirmary. London: John Churchill, Princes Street, Soho. 1849. Pamphlet, pp. 30.

The Address delivered at the Anniversary Meeting of the Worcestershire Natural History Society. By George Woodyatt Hastings, of the Middle Temple. Worcester: Deighton and Co., pp. 16.

Notice on Homeopathy. By John Loftus Marsden, M.D. London: William Headland, Princes Street, Hanover Square. 1849. 8vo., pp. 180.

On the Employment of Nitrate of Potash in Acute Rheumatism. By W. R. Basham, M.D., Physician to the Westminster Hospital. Pamphlet, pp. 24.

Lectures on Electricity and Galvanism, in their Physiological and Therapeutical Relation, delivered at the Royal College of Physicians. By Golding Bird, A.M., M.D., F.R.S., F.L.S. London: Longman and Co. 1849. Small 8vo, pp. 208.

American Journal of the Medical Sciences, July, 1849.

Flora Sidostiensis; or a Catalogue of the Plants indigenous to the vicinity of Sidmouth. By W. H. Cullen, M.D. Sidmouth: W. S. Hoyte. London: Simpkin Marshall and Co.

The Journal of Psychological Medicine and Mental Pathology. Edited by Forbes Winslow, M.D., October, 1849.

London Journal of Medicine, October, 1849.

Monthly Journal and Retrospect of the Medical Sciences, October, 1849.

Demonstrations of Anatomy. By G. V. Ellis, F.R.C.S. Professor of Anatomy in University College. Part II. London: Taylor, Walton, and Maberley, Upper Gower Street. Small 8vo, pp. 308.

Code of Ethics of the American Medical Association. Reported from the American edition. Oxford: John Henry Parker. London: John Churchill. 1849.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

NOTICE TO MEMBERS.

The Secretary presents his compliments to those members of the Provincial Medical and Surgical Association whose Subscriptions remain in Arrear, and begs respectfully to call their attention to the following Law, which was passed unanimously at the Anniversary Meeting, held at Bath, in 1848:—

"If any Member's Subscription remain unpaid twelve months after it shall have become due, the *Medical Journal* and other publications of the Society shall be withheld from such Member till his arrears be paid."

He earnestly entreats all those gentlemen whose subscriptions are now in arrear, that they will cause them to be paid, either to himself, or to the Treasurer, Dr. Hastings, without further delay.

JAMES P. SHEPPARD,

Secretary to the Association.

TO CORRESPONDENTS.

Communications have been received from Mr. Humphry, Mr. Crouch, Dr. Robertson, Mr. Ewin, Dr. Duncan, Mr. Bartrum, and Mr. Lord.

In answer to the inquiries of *A Student*, we can give no certain information as to the publication of the new Pharmacopoeia. We do not know for what purpose he wishes a substitute, but the book he mentions is the best authority at present in print.

It is requested that all letters and communications be sent to J. H. Walsh, Esq., Foregate Street, Worcester. Parcels and books for review may be addressed to the care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON SURGERY,

DELIVERED IN THE
MEDICAL SCHOOL OF CAMBRIDGE.

By GEORGE MURRAY HUMPHRY, Esq.,
Downing College, Surgeon to Addenbrooke's Hospital.

LECTURE XV SCROFULA CONTINUED.

Scrofulous disease of the absorbent glands; changes that take place in them; diagnosis generally easy; occasional difficulties; treatment.—Scrofulous disease of the skin; ulcers; ulcers preceded and accompanied by tuberculous deposits of lymph.—Disease of cellular tissue occasioned by deposit of scrofulous lymph in it, diffused or circumscribed: treatment.—Abscesses in skin and cellular tissue: treatment.—Scrofulous disease of the bones; deposit of lymph into them, which softens or becomes calcareous; ulceration: treatment.—The bone is not generally the part first affected in scrofulous disease of a joint.

The parts most liable to be affected with scrofulous inflammation are the absorbent glands, the skin, and subcutaneous cellular tissue, the mucous and synovial membranes, and the bones. It is to be observed that the disease is in individual cases frequently confined to one of these structures. A patient suffers under enlargement of the absorbent glands in the neck, the axilla, and the thorax, but has no vestige of scrofula in any other part; another has numerous ulcers on the skin, but not one diseased gland. In a third the bony fabric is inflamed and ulcerated at many points, without being accompanied by any ulceration of skin, or enlargement of glands. So far as I know, patients of all ages and temperaments, within the scrofulous range, are equally liable to disease of either of these tissues. I am not aware that any particular medicine or plan of treatment deserves to be recommended in one set of cases more than in the others. The general rules which I laid down in the last lecture are alike applicable, or nearly so, in whatever form or structure the disease makes its appearance.

The disease of the absorbent glands is the most common of scrofulous affections. It appears most frequently in the cervical glands beneath the jaw, behind the sterno-mastoid muscle, and along the course

of the carotid and subclavian vessels. It is not uncommon in the axilla, and at the inside of the bend of the elbow. In the lower extremity the glands are not often diseased, but the bronchial and mesenteric glands, particularly in children, are very liable to scrofula.

It is not very clear why the absorbent glands, which are seldom the primary seat of disease under other circumstances, should be so pre-eminently the victims of scrofula. It has been supposed that some of the superfluous quantity of imperfectly assimilated fibrin and albumen is detained in these organs, and gives rise to their enlargement, suppuration, &c. This, however, is little more than conjecture. You will remark it to be rather a singular circumstance that the inguinal glands, which are more often than any others attacked with simple inflammation (I mean inflammation having no dependence either upon syphilis, a scrofulous habit of body, or other particular exciting cause,) are less frequently affected with scrofula. I can give no explanation of this. Perhaps all the tissues of the neck and upper extremities are of finer and more delicate construction than those of the lower limbs, and therefore somewhat more liable to scrofula, but this difference is not sufficient to account for the great comparative susceptibility of the absorbent glands in the upper regions of the body.

This affection of the glands, like other scrofulous inflammations, is sometimes attributed to a cold, disorder of the general health, an attack of measles, or other exciting cause, but very often begins spontaneously. A small lump—a kernel as it is called—is observed in the neck. It is moveable, not painful, and attracts but little attention; others appear, and these uniting with the first and enlarging, form considerable masses, whose doughy lobulated feel, together with their situation, the mode of their appearance, and the absence of much pain or tenderness, are so characteristic, that we have very little difficulty in recognising them.

If you examine a gland in this state you will find it somewhat vascular, as well as swollen, with yellowish spots or masses diffused through it in greater or less number. These masses consist of that ill-organised lymph called scrofulous matter, about which I have already spoken. They are often separated by a well-defined line from the rest of the structure of the gland, and are of various consistency. Sometimes they look very much like the common tubercles which are met with in the lungs and other parts. They increase in

size, so as to occupy the entire substance of the gland taking the place of its natural structure, filling up and distending its capsule. As the disease goes on these masses soften into a thick curdy fluid. This softening process is generally attended with suppuration, a few pus globules are intermixed with the fluid, and a scrofulous abscess is thus formed. About the time when softening commences these glands become rather more tender and less moveable, in consequence of the inflammation affecting the cellular tissue on their exterior, and agglutinating the parts by effusion of lymph. The advance of the abscess to the surface is slow, not attended with much pain, the integuments after a time become red, and a good deal undermined, and at last give way; troublesome sinuses generally remain; perhaps the skin ulcerates over a considerable surface, and it is long before a complete cure is effected, the time being of course greatly lengthened when several glands are affected, suppurating and bursting in succession.

Now and then it happens that an abscess of this kind formed in a scrofulous gland subsides spontaneously; the fluid contents, under such circumstances, becoming absorbed, the remainder dry up, and perhaps are ultimately the seat of calcareous infiltration. Here are glands from the mesentery and the neighbourhood of the bronchi which have undergone this change.

I have said that the diagnosis of these enlarged scrofulous glands is generally easy, and we are much assisted in it by the number of them existing at the same time. It now and then happens, however, that in persons who have not the scrofulous diathesis strongly marked, one or two glands only are diseased and enlarge very slowly so as to form hard round swellings, which are not easily distinguished from fibrous and other tumours. They have not unfrequently been removed under that impression. These solitary swellings may suppurate slowly, forming abscesses with thick walls, which undergo very little change from month to month. Three or four years ago a man presented himself with one of these abscesses in the neck, which was of very long standing. It was round and very firm, and the nature of the swelling was doubtful, till a drop of thin yellowish purulent fluid passed along the groove of a needle thrust into it. I laid the cavity freely open; it had very thick tough walls which I divided unsparingly, but the wound healed nearly up, leaving the sac almost as before, with a small orifice through which some discharge has continued to escape ever since. It is of no great inconvenience and I have thought it better not to take any further steps to expedite the cure.

Swollen and indurated absorbent glands lying in the neighbourhood of the thyroid substance are sometimes mistaken for enlargement or tumours of that body. When situated over the course of the carotid artery they simulate aneurism so closely as to render the diagnosis occasionally very difficult. Many of you remember how much we were all puzzled by a case of this sort not long ago in a lad, who came into the hospital with a painful pulsating tumour situate just above the left sterno-clavicular articulation. There was a distinctly audible bruit over and near it. We

were for some time doubtful whether it was an aneurism or not, but careful examination showed that when the tumour was pulled forwards, the muscles of the neck being relaxed, the pulsation and bruit could be less distinctly felt and heard. It rose and fell during deglutition, and the enlargement of some other glands in the neighbourhood at length proved the real nature of the swelling.

You will see almost every day in the out-patient room cases where a considerable number of the cervical or axillary absorbent glands, or both, have enlarged slowly, without pain, and have formed great, firm, nodulated masses, adherent to the surrounding parts, and, it may be, interfering with the movements of the head and neck, or perhaps even displacing the lower jaw, and causing difficulty of breathing and swallowing. They do not often attain to this severity, but they are unsightly, productive of a good deal of inconvenience, and excite the apprehensions of the patient and his friends. These hard, fixed, slowly-forming masses, are found in persons not decidedly scrofulous; they do not generally suppurate, but in course of time waste away gradually. I have found their departure hastened by small doses of mercury, given perhaps in the form of the bichloride, by the iodide of potassium, and sometimes by the cod-liver oil, the effect of these medicines being aided by slight stimulating applications to the skin, such as the iodine ointment, diluted three or four times with cerate. Now and then I have seen decided benefit from the employment of nitrate of silver, so as to occasion scaling or vesication of the cuticle, or from a succession of small blisters over the swelling when the skin has been sound.

We are in the habit of employing these mild stimulating applications to the skin with occasional advantage in the ordinary scrofulous enlargement of glands, at the same time that attention is directed to the general health in the manner described in the last lecture, and suppuration may often by these means be prevented. When suppuration has taken place, and the skin begins to be reddened, so that there is little probability of the absorption of the fluid being effected, I think it is well to make a small opening into the abscess, for if this be done early the undermining of the integuments is prevented, the sinuses are less likely to be troublesome, and the cicatrix is less ugly. Nevertheless we are often disappointed with the result of these incisions, for abscesses which are allowed to burst, sometimes do as well and heal as quickly as those which are opened in the same patient. I do not, therefore, press the use of the knife in these cases, when it is much objected to, because I have no strong feeling in its favour.

The skin is subject to a variety of affections in scrofulous persons, which is no wonder when we reflect that the great delicacy of its structure forms one of the most obvious features of this constitution. It is easily sunburnt, freckled, and blistered in the summer, and cracked or chapped in the winter, and inflammation is excited in it by very slight causes. Scrofulous children are frequently covered over with eczema, psoriasis, and a variety of cutaneous eruptions, which are subdued

with difficulty, and are very likely to recur. Any slight irritation, a mild stimulating liniment, and particularly the application of a blister, will in these subjects produce a very troublesome humour, if not an ulcer. Often the skin is the seat of ulcers commencing spontaneously, affecting it superficially, and spreading for a considerable distance over its surface. These ulcers are pale, with flabby, languid, glazed granulations, their discharge is thin, and the skin around is red and irritable, or of a blue leaden colour, and undermined. The integuments under the chin, and on the fore-parts of the neck and chest, are affected in this manner more frequently than in any other region of the body. Mild astringent lotions, or the ointments of the iodide of lead and nitrate of mercury, are useful applications to these ulcers after due attention has been paid to the general health. Sometimes they heal up all at once, but the cure is probably not sound, the cicatrices are delicate and irritable, marked with fine arborescent vessels, and ready to break out again upon the slightest provocation.

The scrofulous ulcers of the skin frequently commence with small lumps like tubercles, consisting of the ill-organized lymph described above, which is deposited in little masses in the deeper layers of the cutis, and in the immediately subjacent cellular tissue; these soften, and the skin gives way over the centre of each, disclosing a greyish mass, like a slough, which comes out piecemeal, and leaves a small round excavated ulcer, with bluish undermined edges. Other lumps of a similar kind form in the skin near by, and running the same course leave several ulcers, which probably spread into one another, so as to form one large irregular surface; the integuments forming the borders of this are undermined or rest upon a stratum of the soft grey substance, so that a probe may without difficulty be passed some distance beneath them. Now these ulcers have often a more or less circular shape, and may continue to spread at the circumference while cicatrization proceeds from undestroyed fragments remaining in the middle, so that the sore by degrees assumes a ring or horse-shoe shape, and the ulceration goes on in the concavity, while the cicatrization proceeds on the convexity of the crescent. Here is a drawing of one of these ring-shaped scrofulous sores, composed of numerous small spreading ulcers, which surround a central shining cicatrix, and you see the latter is represented as having a healing edge.

The particular shape and appearance of these ulcers, added to the time of life when they generally appear, which is from twenty to thirty-five, and the disposition to heal at one part while they are spreading at others, have caused them to be very often mistaken for the phagedenic ulcers occurring in the tertiary stages of syphilis. They resemble them so closely that it is often by no means easy to distinguish the one from the other, and it is still more difficult to do so if the palate, throat, and bones be likewise the seat of disease, though fortunately this combination of affections of the skin, mucous membranes, and bones, is not usual in scrofula. The general appearance of the patient, and his character—moral as well as constitutional—will be

of some assistance. It is also to be observed, that the syphilitic sore, though it *commences* at many points, mostly *continues to spread* from one centre, and does not increase like the scrofulous by the formation in its circumference, of other small ulcers, which become confluent with it and with one another; moreover, the tertiary ulcer of syphilis is not preceded and surrounded by the formation of those tuberculous deposits of ill-organized lymph in the texture of the skin, which form one of the peculiar features of the scrofulous sore.

This disease of the skin has not, I think, attracted much attention, and to impress its characters more strongly upon you, I will describe a case which is fresh in the recollection of some of you. A delicate, light complexioned, strumous looking woman, first became a patient in February, 1848, on account of a ring of superficial ulceration, two inches and a half in diameter, situate upon the left shoulder; it was composed of a number of small irregular ulcers, some of which had become confluent into larger ones, and it surrounded an uneven, unhealthy-looking cicatrix, in which were some spots of recommencing ulceration. On the exterior of the ring, as well as between the ulcers that formed it, were numerous small tubercular elevations of the skin, and small apertures on the summits of some of these showed them to be occasioned by a deposit of soft greyish substance in the tissue of the cutis. The disease had commenced ten months previously, in the formation of a lump upon the shoulder, which burst; the ulcer so caused healed, and the present disease began around the cicatrix. In addition to this she suffered under inflammation of the gums and of the larynx; her voice was weak and hoarse, inspiration attended with a wheezing noise, the breath fetid, and there was tenderness about the larynx. For a time the circle of disease upon the shoulder widened, by the formation of fresh tubercles, proceeding to ulceration in the circumference, while the central cicatrix continued to increase in size almost *pari passu*. In course of time, however, her general health improved, the tubercles became less frequent, while the cicatrix went on enlarging, and the small ulcers closed, so that in June of this year the whole surface was healed up, soundly to all appearance, and the condition of the mouth and throat were greatly improved. A variety of medicines were given in this case, including quina, iodide of iron, and cod-liver oil, but none was productive of such decided benefit as small doses of the dilute nitric acid in the decoction of sarsaparilla. We have other cases of the same kind now under the treatment, but I cannot say that the same remedy is always equally efficacious.

I have seen these ulcers upon almost every part of the body, perhaps on the face and upper extremities rather more frequently than upon the lower limbs. They are difficult to cure, but yield in the long run to the general and local treatment which we employ in other scrofulous affections, and do not require mercurial treatment, though the patient is often subjected to it from their being supposed of syphilitic nature.

There is a disease of the *cellular tissue* closely allied

in appearance and progress to that just described in the skin, and depending upon the same cause, viz., the deposit into it of ill-conditioned fibrin or lymph which softens into a greyish, sodden, sloughy substance, and causes ulceration of the skin over it. This disease affects sometimes an extensive stratum of the cellular tissue, and the skin giving way over it at several points, irregular ulcers are formed much like those last described except that they are deeper. When the skin is destroyed, you see the sodden ashy stratum of tissue, through which you may without difficulty pass a probe for a considerable distance, and the parts around give to the finger a sensation of their being boggy and unsound. This disease is most common in the lower extremities, and frequently extends from the knee to the ankle; not that the skin is destroyed in all this extent, but it is reddish or livid and shiny, ulcerated at many places, and the cellular tissue beneath is more or less altered. We are sometimes surprised at the rapidity with which these ulcers heal up, for cicatrization may proceed over this unhealthy stratum of tissue, and the cicatrix may assume a sound healthy condition; so that it is not essential for the sloughs to be entirely discharged. The apparent progress thus quickly made is, however, too often deceptive, and we may very likely be disappointed by seeing the ulcers begin again when we had hoped the case was nearly well. I am not aware that the deeper layers of cellular tissue, such as those forming partitions between the muscles or investing the internal organs, are affected in this manner.

The local treatment consists in the employment of mild astringent lotions with well regulated pressure by means of oil silk and a bandage. Sometimes a stronger stimulus, such as nitrate of silver in substance or solution, by exciting a little inflammation, will be found to clear away the sloughs, promote a more healthy discharge, and induce cicatrization. They are troublesome cases, and the disease driven from one spot is very likely to make its appearance at another, so that you will frequently see a limb covered over with cicatrices, which are depressed below the surrounding skin, and fixed to the fascia beneath from the loss of the subcutaneous stratum of cellular tissue, in addition to that of the skin itself.

This disease of the cellular tissue is more common in a circumscribed than a diffused form, particularly in children. A little firm lump is found under the skin, which from its mobility and the unaltered state of the skin over it might be mistaken for an enlarged gland, were it not that such lumps very often occur in places where there are no glands. It is not tender or painful, and is discovered accidentally. If it be cut into it is found to consist of a mass of the yellowish white scrofulous lymph described above infiltrated into the cellular tissue. It is somewhat firmer than when it exists in a diffused form, and much resembles tuberculous deposit. In course of time it softens; the skin becomes red, thin, undermined, and bluish over it, and at last ulcerates in the middle. The ulcer thus formed has peculiar characters. It is raised above the surrounding skin, its surface is covered by the dirty yellowish slough

of lymph in the cellular tissue, which extends for some little distance beneath the livid undermined integument forming the margin of the orifice, and it furnishes a thin fluid mixed with flakes of the slough gradually separating and passing off. By degrees the slough is disintegrated and discharged piecemeal, the livid integuments ulcerate away, the surface of the sore becomes clear, and cicatrization proceeds, closing up the gap, but leaving an indented scar which is ever after conspicuous and fixed to the subjacent fascia in consequence of the loss of the cellular tissue. These sores generally heal without much difficulty. Now and then the disease spreads from the point first affected to the surrounding tissue which becomes disorganised and sloughs away, leading to extensive destruction of the skin, as in the woman whose case I just mentioned to you; but this does not very often happen. The difficulty of the case consists in the liability to the formation of other similar lumps beneath the skin in various parts of the body, each of these running its course in the manner I have described. They are thus the cause of great annoyance and suffering, as well as of much disfigurement. I have occasionally met with these circumscribed deposits of scrofulous lymph in the deeper parts of the limbs and in the interior of the body, in the front of the vertebral column, and in the substance of the lungs, liver, spleen, and kidneys.

Sometimes they are the consequence of an injury to a limb, which has weakened its vital force and rendered it liable to disease. Thus some few months ago, a delicate woman applied at the out-patient room, on account of ulcers of the forearm, which were preceded by circumscribed deposits of lymph in the cellular tissue, such as I have been describing, and two or three of these in an early stage could be felt beneath the integuments of the arm. She said that she first suffered from the complaint three years ago, after an injury to the elbow, which required leeches, and that she had not been free from them since.

While situated fairly beneath the skin they may be sometimes dispersed by stimulating applications, such as the tincture of iodine or nitrate of silver, which cause scaling of the cuticle or slight vesication. When they have burst, the discharge of the sloughs and the healing of the ulcers is assisted by solutions of sulphate of zinc or copper, under oil-silk and a bandage.

A very similar disease of the cellular tissue occurring both in a diffused and circumscribed manner, is met with in persons who are not of scrofulous habit, but who are enfeebled and out of health in consequence of over exertion, bad living, or intemperate habits, whose digestive organs are disordered, the tongue white, and urine loaded. The complaint is in these cases more easily controlled and more quickly eradicated than when it depends upon the scrofulous character of the constitution.

Small abscesses form in the skin, and larger ones in the subcutaneous tissue of scrofulous persons. They give scarcely any pain till the integuments are reddened over them, and they are often discovered accidentally when they have attained considerable size. They some-

times originate in the softening of the masses of lymph which I have just described; at others the suppuration takes place without being preceded by any deposit of lymph. When seen in the early stages you should endeavour to disperse them, which may not uncommonly be effected by attention to the general health, by air and exercise, and by the application of iodine or a succession of small blisters to the skin over and immediately around them. When the commencing redness of the skin precludes the hope of a cure by absorption, I think it is the best plan to open them, for if that be not done, the integuments become extensively undermined before they burst, and troublesome sinuses with ugly cicatrices are the result. The little abscesses forming in the cutis itself, (the cutaneous abscesses,) for the most part, exist in considerable numbers, are particularly common about the neck and front of the chest, and unless they are opened early they destroy the superficial layers of the skin, and leave ulcers which exhibit a languid indolent character with great indisposition to heal.

As the result, then, of inflammation upon the surface of the body in scrofulous persons we have—besides pimples, pustules, and a variety of eruptions—ulcers, often in great numbers, and so extending over a considerable area, though not individually of great size; ulcers preceded and surrounded by deposits of lymph, diffused or in spots, in the substance of the cutis, and ulcers preceded by small abscesses which are also formed in the substance of the cutis. We have likewise, in the subcutaneous tissue deposits of lymph, diffused and circumscribed, and abscesses, both of which involve the skin during their progress, and lead to its destruction much in the same manner as when the disease affects the structure of the cutis itself.

The skeleton of the scrofulous child exhibits an imperfection in its organization, and a liability to disease corresponding with that of the soft parts. It is found to be deficient in its early constituents, and to contain a superabundance of oily matter, and it is very frequently the seat of inflammation, which sometimes occasions necrosis, but more often leads to ulceration. The disease affects chiefly the spongy bones, the cranium and face, the bones of the foot and hand, and the extremities of the long bones.

In the early stages of the disease the bones are found to be preternaturally vascular, and there is effusion of serous fluid into their cancellous texture. Next they become more porous than natural in consequence of interstitial absorption going on in them, weakening their frame work and enlarging their cells. The earthy components suffer in an especial manner, and in consequence of their removal the bones become soft, so that a scalpel will pass into them without its edge being turned. A deposit of the peculiar grey, friable, ill-organized lymph, which I have described as the scrofulous substance, may take place in the cells of the bone, and it is probable that the extensive destruction of the cancellous extremities of bones which is sometimes observed in scrofulous persons is in part occasioned by the softening of this substance involving the osseous texture in its own destruction.

This friable, cheesy, ill-organized lymph which forms the scrofulous deposit in bones, does not invariably soften and suppurate, and so lead to the destruction of the bones. Such result seems to depend rather upon the continuance of the inflammation which produced it, than upon anything essentially deleterious in its own nature. That at least is true in great measure, though it must be admitted that the inferior quality of the lymph renders it peculiarly liable to such changes, and its imperfectly organisable character must make it sometimes a source of irritation to the surrounding parts, and an exciter of that inflammation which expedites its own dissolution. In some instances a change takes place in it quite the reverse of softening; it becomes gradually drier and more friable, and at last undergoes calcareous degeneration, like scrofulous deposit in other places; it is thus converted into a white chalky powdery substance, which seems to lie loose in the cancellous texture of the bone, or at any rate to be connected with the walls of the containing cells by a very feeble tenure.

A more common form of disease of bones in these delicate persons consists in inflammation of the exterior of the bone and periosteum, occasioning thickening of the former from deposit of crumbling earthy matter on its surface, and the appearance of small ulcers, with drops of thick curdy pus intervening between them and the periosteum. As the disease goes on the pus increases in quantity, makes its way through the periosteum, and ultimately bursts through the skin, the ulcers on the bone having been also on the increase during this time. The sinuses thus occasioned continue to discharge a thin watery fluid for months, or it may be, for years; little fragments of crumbling bone are occasionally detached, and pass through the openings, but in the course of time these ulcers heal; the gaps occasioned by them being only in part filled up the sinuses close and leave cicatrices which are indented and closely connected with the bone.

This disease often occurs upon several parts of the same person, one bone becoming affected after another, and it does not always terminate so favourably as I have just described, for the ulceration sometimes extends more deeply into the bones, and causes great havoc. Thus the bones of the face, more particularly those of the palate, may crumble and ulcerate away till scarce any of them remains; the teeth, becoming loosened, from the inflammation of the membrane which lines their sockets, drop out, and the disease extends to the alveolar processes of the jaw bones. In course of time the parts heal up, but not, perhaps, without leaving great deformity. You will now and then find to your surprise that a considerable portion of the hard palate has disappeared under this crumbling ulceration, with scarce any premonitory symptoms, and with very little ulceration of the soft palate. You will gain information of the fact by pressing the finger against the roof of the mouth, and discovering that it yields very easily; and when the soft palate is destroyed, which takes place before long, a communication exists at once between the nose and the mouth. The opening so made is

and never healed up, though the margin of it may cicatrize, and you are left to your ingenuity to fill the gap by a plate of silver, gutta-percha, or other contrivance.

The metacarpal and metatarsal bones, and the phalanges, are liable to this chronic scrofulous ulceration, the metatarsal bone of the great toe more than any other. There are at the present time in the hospital three young persons with this disease. In one it affects the proximal, and in the other the distal, end of the bone. It commenced with swelling, as if there were synovial disease of the neighbouring joints, but I cannot be sure whether this were really the case, or whether the inflammation commenced in the extremities of the bones themselves. Soon matter formed, and was discharged, leaving sinuses, which lead down to the carious surfaces. Some fragments of bone have been discharged. It may be that removal of some portion will be required, but this is not often necessary, for if the health of the patients be improved, the disease will probably cease, the ulcerated surfaces will heal over, or the adjacent ends become ankylosed, and the toes will be somewhat shortened, in consequence of the loss of some of the bony substance, which will be re-produced only to a very slight extent.

It was long supposed that the common scrofulous disease of the joints commences with inflammation and deposit into the cancellous substance of the bones; the synovial affection being thought to be secondary to this. Recent and more accurate pathological investigation has proved this view to be by no means correct. In the cases where joints have been examined during the early stage of scrofulous disease, the bones have generally been sound, and the synovial membrane the only part presenting the signs of inflammation. The symptoms also accord best with this view, for the swelling, which appears at an early period, and is often the first sign of disease, takes the direction of the synovial membrane, and seems to depend either upon thickening of it, or effusion into its cavity. The cartilages disappear in young subjects without much pain, and the work of destruction is propagated to, and goes on with, great comparative rapidity in the loose friable structure of the articular extremities of the bones. Now and then, no doubt, the order of the progress of the disease is reversed: it may commence with inflammation of the cancellous extremities of the bones, and extend from them to the synovial membrane and the cartilages, but in the greater number of cases the synovial membrane is the part first affected.

I have no particular remarks to make with regard to the treatment of this disease of the bones, in addition to those which I have specified when speaking of the general management of scrofulous patients. The inflammation certainly is not more easily subdued when it attacks the bones, than when it appears in the softer structures of the body; and I am not aware that any benefit is to be expected from local applications. I am in the habit of allowing the patients to go out of doors, even at the risk of some detriment to the part affected. I think in the early stages of the disease, when the symptoms of inflammation only are present, that a few

leeches may be applied, and repeated at short intervals, with advantage. You will remember that this local depletion is by no means incompatible with a general tonic regimen. When suppuration has taken place, the importance of endeavouring to promote the absorption of the pus is increased by the difficulty with which the cure of a sinus connected with an ulcerated bone is accomplished; and I have before told you, that the absorption of pus lying upon a diseased bone is more likely to take place than under other circumstances. We have, therefore, the double reason for persevering with those applications which seem to assist in promoting this desirable end, such as the tincture of iodine painted once or twice a-day upon the skin, so as to keep up a free scaling of the cuticle, or a succession of small blisters in the immediate neighbourhood of the abscess.

The only instance in which I am aware that scrofulous inflammation affects the cartilages, is in the larynx, where they suffer both primarily, and as a consequence of disease, of the mucous membrane. In this specimen the cricoid cartilage is necrosed, separated from the adjacent tissues, and bathed in thick curdy pus. The patient died in consequence of the swollen state of the mucous membrane and submucous tissue closing the opening of the glottis. Here are also specimens of the same disease in the thyroid as well as the cricoid cartilage, and it is in like manner attended with the formation of abscess and with inflammation of the mucous membrane of the larynx. The disease you see is in each instance confined to the larynx, and does not extend to the trachea, so that the operation of tracheotomy, performed in the usual situation, would be fairly below the seat of the mischief; this would not be quite so certain if laryngotomy, or the incision between the cartilages of the larynx, were resorted to. These cases, however, are generally complicated with so much disease in the lungs and other parts, that we are not often justified in resorting to an operation of some danger for the doubtful chance of relieving this one of the many ailments under which the patient suffers.

ON OVARIOTOMY.

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(Read at the Quarterly Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, Sept. 27th 1849.)

MR. PRESIDENT,—Having lately performed with success an operation for the extirpation of a multilocular ovarian cyst, an account of which has appeared in the *Journal* of our Parent Association, I will venture, with your permission (this being the first case that has occurred in the western part of England,) to offer a few remarks in justification of so dangerous a proceeding.

In doing this, I will not attempt to advance any new facts on the subject, but endeavour to excite a

discussion as to whether the art of medicine can suggest any remedy which would preclude the necessity of resorting to so fearful an expedient as "ovariotomy."

Every one present, I think, will accede to the opinion of Mr. Safford Lee, who says that "the operation is a defect in the art of surgery, and that the knife should be avoided in all cases that it is possible; and that surgeon (he continues) will be esteemed the greatest benefactor to society and the world at large, who would suggest some means by which the disease could be cured without reverting to 'ovariotomy.'" The question I would ask then, is, do we possess any medical remedy which can be depended upon for the cure of ovarian dropsy?

Dr. Hunter says that "ovarian dropsy is an incurable disease, and that the patient will have the best chance of living longest under it who does the least to get rid of it." Dr. Elliotson remarks,—"If any medicine does good in these cases it is iodine;" but although he has seen "some cases diminished, and some apparently cured," by this remedy, he agrees with Dr. Ashwell, and other eminent physicians, that no medicine can be relied on in this troublesome disease.

Dr. Watson, in the last edition of the "Principles and Practice of Physic," published so recently as 1848, observes,—“My position, as physician to a hospital, has brought under my notice many cases of ovarian swelling, at a very early period of its development. I have treated such cases assiduously with the remedies of chronic inflammation, frequent topical bleedings, and the use of mercury, till the gums were affected; with the remedies of ordinary dropsy, diuretics, and drastic purgatives; and with remedies accounted specific, the Liquor Potasse, and the various preparations of iodine; and I must honestly confess to you that I am unable to reckon one single instance of success.”

Secondly, I would appeal to the members of this Association as to whether the system of "compression," recommended and tried by Dr. Hamilton, of Edinburgh, and Mr. Brown, of London, holds out any reasonable promise of cure? In the opinion of many who are competent to decide, this remedy is considered an entire failure, or at best only capable of preventing the rapid growth of ovarian tumours.

It would indeed be most gratifying could it be proved, that "pressure," or "iodine," or "diuretics," or any other medicine could avail, in the case of a multilocular cyst.

Thirdly, I would ask, what dependence can be placed on "Paracentesis Abdominis" as a remedy in ovarian dropsy? Dr. Blundell, a most eminent authority, says,—“Make the best of it; and tapping, after all, is an unsatisfactory sort of remedy; dangerous in scirrhus-dropsy; of partial relief in dropsy of many cysts; of no effect where the cystic material is viscid; obnoxious to inflammations, adhesions, suppurations, exhaustions, repetitions, and death, even in cases the most favourable; and the more I have seen of the operation (continues the doctor) the more I have felt inclined to whisper to myself, when the surgeon has taken up the instrument, I wish I could do something better.”

It appears also, that the operation of "tapping," which has hitherto been considered the best mode of palliating the disease, is a more dangerous remedy than was formerly supposed. Out of forty-six cases of ovarian dropsy, collected by Mr. Southam and Mr. Lee, twenty died after the first tapping, sixteen within one month after the operation, and ten of these sixteen, or one half of the whole number, died in seven days after the evacuation of the cyst. "Paracentesis abdominis" never effects a cure, except in the case of a unilocular or simple cyst. It is almost as dangerous an operation as ovariotomy, and seldom gives more than temporary relief. This may be considered the most potent argument in favour of ovariotomy.

Another strong reason for seeking a more efficient remedy than "tapping" is, the early mortality of ovarian disease. Mr. Lee states that "he has seen a small ovarian cyst progress so rapidly in a *fortnight* as to acquire a large size, obstruct the breathing, and severely impede the vital functions." Of fifty cases which came under the notice of Dr. Frederick Bird, four died within one year from the commencement of the abdominal enlargement, twelve within two years, twelve within three years, ten within four years, and all the others within ten years.

Several other surgical operations on the cyst itself have been suggested and performed. Portions of the cyst have been excised, setons have been passed through the walls of the sac to produce inflammation and adhesion, moreover the cyst has been injected with irritating fluids; but all these plans, as they are seldom attended with success, have been pretty generally discarded from modern practice.

Lastly, with regard to the operation of ovariotomy. I am aware that we have high authority against its performance. Sir Charles Bell, Dr. Hunter, Mr. Lawrence, Dr. Seymour, and the late Mr. Liston, have all recorded their opinion that the operation is unjustifiable.

On the side of those who sanction the operation, Dr. Blundell, Dr. Clay, and Dr. Frederick Bird, may be justly considered a host in themselves, because the first of these gentlemen has spent a long life in a constant attention to the subject, and, as early as 1822, predicted that the operation would, some day, come into general use; the second has saved the lives of twenty-three patients by this glorious triumph of modern surgery; the last has performed the operation seven times with unvaried success.

In addition to this it appears, from a table I have drawn out, that in England alone twenty-three medical men, whose names have been published, have performed the operation with various success, and five of these are London hospital surgeons.

The number of cases of ovariotomy performed by these twenty-three operators is seventy-three and thirty-two of these by Dr. Clay. Of the seventy-three cases forty-nine were successful, and twenty-four fatal, causing a mortality of one in every three cases. This great mortality has arisen, perhaps, from a bad selection of cases for the operation, and from the imperfect way in

which the vessels of the pedicle have been secured, as by far the more frequent causes of death are hæmorrhage and peritonitis, the latter being the consequence of extensive adhesions.

In making the above calculations I exclude those instances of gastrotomy in which no tumour was removed, because these errors are not so likely to recur when the diagnosis of ovarian tumours becomes more accurate. It is clear that skill alone in the operation is not the only requisite necessary for success, since, of the five London hospital surgeons above alluded to, viz., Mr. Bransby Cooper, the late Mr. Aston Key, Mr. Solly, Mr. Benjamin Phillips, and Mr. Cæsar Hawkins, the latter gentleman is the only one who has succeeded. It is also absolutely necessary that the case should be well suited to the operation, the patient of a good constitution, and of previously healthy habits, and that the most rigid attention should be paid to the temperature of the room, as well as to the after-treatment.

It is useless for any one to attempt to decide which is the best of the three operations proposed, the "large,"

the "median," or the "minor," as neither of them would apply to every case, and each has its own peculiar advantages according to the size of the solid part of the tumour to be removed.

In conclusion, I would venture to assert, that not only is the operation legitimate and justifiable, provided an appropriate case is chosen, and the diagnosis made clear, but that, if other means fail, in the words of Mr. Lee, "the surgeon is bound to give to his patient the last aid of his art, and remove a tumour, which if allowed to remain tends to destruction."

Allow me to add, Sir, that I will offer for the inspection of the gentlemen present the ovarian cyst that was taken from my patient, and I think it will be inferred, from its size and the number of separate cells it contains, that there was little hope that any means, short of extirpation, could have effected a cure; and as the greater number of these sacs contained a fluid which could not be let out with the trocar, the only way of removing the tumour was by a large abdominal section.

TABLE
Shewing the result of seventy-three cases of Ovariotomy, which have been performed in England by operators whose names have been published.

OPERATORS.	Cyst removed entire by "Major Operation."	Cyst removed by large incision and puncture.	Cyst removed by median section and puncture.	Cyst removed by "Minor Operation."	FATAL.	SUCCESSFUL.
Dr. Clay	26	6	...	...	12	20
Mr. Walne	4	...	...	...	1	3
Mr. Jeaffreson	1	1	1	1
Mr. King	1	...	1
Mr. West	3	1	2
Mr. B. Phillips	1	1	...
Mr. Crisp	1	...	1
Mr. Southam	2	...	1	1	2
Mr. Morris	1	...	...	...	1
Dr. F. Bird	7	...	...	7
Mr. Heath	1	...	...	1	...
Mr. Lane	4	1	1	1	5
Mr. Aston Key	1	...	...	1	...
Mr. B. Cooper	1	...	...	1	...
Mr. Greenhow	1	...	...	1	...
Mr. W. B. Page	1	...	...	1
Mr. J. Dickin	1	...	...	...	1
Mr. Solly	1	...	1	...
Dr. Protheroe Smith	1	...	...	1	...
Mr. H. E. Burd	1	...	...	...	1
Mr. Cæsar Hawkins	1	...	1
Mr. Elrington	1	...	...	...	1
Mr. Crouch	1	...	...	...	1
	30	22	11	10	24	49

ON CHOLERA.

By C. W. BELL, M.D., MANCHESTER.

To the Editor of the Provincial Medical and Surgical Journal.

SIR,—Having read with much interest the very excellent “Lectures on Cholera,” published in the *Provincial Medical and Surgical Journal*, by Dr. Charles W. Bell, of Manchester, I felt anxious to learn whether the treatment by iron and quinine found so efficacious in Persia, had been adopted by Dr. Bell since the recent invasion of the fearful epidemic into this country, and with what success; I therefore wrote to Dr. Bell, begging him to be comprised in a letter. That highly-talented member of the profession replied to my application by the accompanying communication, which, forming as it does a most valuable sequel to his “Lectures on Cholera,” I am sure you will be happy to find a place for in the next number of the *Provincial Journal*.

I have the honour to be, Sir,

Your most obedient servant,

WM. HALL, M.D., &c., &c.

12, Clifton Place, Exeter,

October 29, 1849.

Manchester, October, 1849.

MY DEAR SIR,—I find it impossible to reply to your questions shortly, as I do not know how far we happen to concur in our definition of cholera. It appears to me that much of the diversity of opinion regarding the nature and treatment of cholera arises from the profession not being agreed as to the meaning of terms; from not defining exactly what we mean by cholera, and what is essential to constitute the disease; and also from not sufficiently distinguishing between two most opposite conditions of the system, viz., the active resistance opposed by the powers of life to causes of disease—which we term fever and inflammation—as contrasted with that paralyzed condition of the circulation, and complete yielding of the vital powers to the morbid agency which we observe in cholera.

The object of the lectures to which you allude in such flattering terms, was to inquire whether anything peculiar is invariably manifested in every one of the different forms that Asiatic cholera assumes, such as we might consider to be essential; and this inquiry seemed to show that there is one thing constant, and without which no disease can justly be regarded as cholera, however varied the other symptoms, viz., loss or diminution of those vital properties of the capillary circulation by which the blood is preserved fluid, and prevented from adhering to the interior of the blood-vessels—by which those reactions between the blood and tissues are performed which are necessary to life—and of which the evolution of animal heat is one important result.

In genuine unmixed cholera this want of vital action in the smaller blood-vessels was pointed to as the first effect of the epidemic influence on the body, both in point of time and of importance, and as preceding every other symptom. The effect of this condition of the vessels of the extremities is contraction of the veins, which causes an exudation of cold fluid on the skin, and forces the blood into the great interior veins of the chest and abdomen, whence it cannot return, on account of the valves of the exterior veins; but the same state of vessels exists in the lungs, which prevents the blood being purified by sufficient contact with the air, obstructs its passage to the left side of the heart, and causes it to be furnished to the body by the arteries in small quantity, and in a condition unfit long to maintain life. Being thus forced inwards from the limbs, and prevented passing through the lungs with freedom, the blood accumulates in the great veins, and would choke the action of the heart if it did not find vent somewhere; but these veins being without valves, allow it to be forced back to their terminations on the intestines, and there when pressed by the continued influx, its more fluid parts are gradually filtered through the membranes, and then gush from the bowels in a sudden torrent of serous purging. The evacuations are without bile or mucus, because the circulation by which bile and mucus are secreted is stopped or reversed, and no urine is secreted because blood is unable to pass through the vessels of the kidneys in opposition to this retrograde force. Such was considered to be the condition presented by pure primary or congestive cholera, but of this we have had comparatively few cases here, for hitherto the influence of cholera has not often been sufficiently powerful to produce its pure effects till the cause presently to be mentioned, arose. Still a few cases of this nature occasionally present themselves, and the symptoms are,—perfectly clean, pale, and cold tongue; hands and feet cold and damp, and the nails blue, before, or along with the first purging, if indeed purging or vomiting occur at all, which are often wanting in this form; the urine ceases from the first; there is pain and oppression, and intolerance of pressure at the pit of the stomach, cramps in the belly and legs, a peculiar struggling action of the heart, and if there be purging and vomiting, it is copious, and of fluid resembling water in which rice has been boiled, inodorous, or only smelling faintly like blood. In such cases I have never yet found the treatment by quinine, iron, bloodletting, &c.—recommended in my lectures—fail, if used before the feet had become warm while the body remained cold. But the disease which is at present so fatal throughout the country is not, once in a hundred cases, of this unmixed congestive character. It is either in the first instance epidemic dysentery, which is variously called English cholera or autumnal diarrhoea—a non-contagious malady, or it is the same disease in combination with putrid fever, which is most virulently contagious, and well known as the putrid dysentery of our cellar population, which sometimes takes the place of putrid fever when epidemic dysentery prevails.

Now, the occult causes, atmospheric or other, by which those distinct diseases—epidemic dysentery and epidemic cholera—are produced, unfortunately co-exist at present in the country; of these the cause of dysentery has of late been more universal and more powerful than that of cholera, attacking the population violently in many places without any case of collapse, (that is, cessation of vital action in the blood-vessels,) following; and in most places where cholera has appeared this autumn, the dysentery without collapse has preceded it by two or three weeks. During the last four years, when we were free from cholera, the same disease has paid us an annual visit—last year and the year before very severely—without any of the cases lapsing into cholera. The weekly bills of mortality are themselves evidence that diarrhœa, though in a certain sense premonitory, is not a stage of cholera, otherwise how could so many die without becoming subject to collapse. We can conceive recovery from an incipient stage, but not death, without the actual access of the disease. But when the cause of cholera exists along with that of dysentery, no sooner is a person attacked with purging, (and his strength thereby reduced,) than the vital powers that had previously sufficed to resist the effect of choleraic influence, yield to it, and the patient falls into collapse; the active condition of the vessels that exists in acute dysentery then stops, and more or less complete cessation of vital action takes place in all the smaller vessels. If, then, dysentery, in its simple non-contagious form is capable of producing this effect, much more will this be the case when it is combined with a cause so opposed to life as putrefaction.

Careful study and inquiry, both here and elsewhere, has so convinced me that this combination of epidemic with putrid disease has been by far the most frequent forerunner of fatal cholera this autumn, that I have no hesitation in stating my belief that almost every case reported as cholera, which has occurred in the purlieus of our towns, ill-drained houses, crowded lodgings, schools, and poor-houses, has been of this nature, before collapse began. The symptoms are as follow:—Easy vomiting and purging, (without much griping,) of watery mucous fluid, slightly tinged with bile, and of a decidedly putrid odour, differing much in appearance, but still more in smell, from the true rice-water exudation. Each motion is accompanied with passage of urine; the tongue is red, warm, and furred in the centre; the extremities warm, and the nails, though dark coloured, as in hepatic affections, are brownish rather than of the blue colour observed in congestive cholera, after the commencement of purging. When this has gone on for some time—it may be only an hour or two—without one symptom which any one conversant with the congestive form of disease would recognise as cholera, a change occurs, for as yet it has not been cholera, but really the reverse, being a state of greatly increased activity of the secreting vessels of the intestines, instead of cessation of secretion; an excitement of their vital action that in every respect resembles that produced by the absorption of croton oil or jalap, resulting in active purging of watery

mucous secretions, instead of passive serous exudations. This very soon reduces the vital powers almost to syncope, and then the superimposition of cholera may be seen most markedly, commencing in the extremities. The limbs become cold, blue, and like wet leather to the touch, urine ceases to be secreted, and the discharges, though they retain much of their putrid odour, lose their excrementitious smell, and become serous instead of mucous, but the breathing is almost natural, and there is none of the struggling action in the heart remarkable in congestive cholera, because the sudden change from over excitement to loss of action in the vessels of the intestines appears so complete, as to render them incapable of opposing any resistance to the revulsion of the blood now driven into them from the extremities. The fluid of this blood is drained off so readily into the bowels, that no congestion or distension of the veins takes place sufficient to disturb and excite the action of the heart; secretion passes almost instantaneously into exudation, and the discharges run in an almost constant stream into the bedclothes. Such is the collapse which succeeds putrid dysentery. As there is little congestion the cramps are slight, and little painful; the feet of the patient, sunk in this hopeless state, begin to become warm long before death, which in the congestive disease seldom occurs more than twenty minutes before the final struggle; by-and-by decided warmth is perceived in the hands, the arms then lose much of their chilly moisture, sudden slight convulsion ensues, and the patient is dead. The body only slightly regains its warmth after death, whereas, after congestive cholera, it becomes almost as warm an hour after dissolution as the natural healthy skin in life. The cause of death in the two cases is different; in the one the patient dies asphyxiated, from want of arterial, and from the circulation of venous, blood in the system, and the overpowering congestion of the great veins and vital organs. This often terminates in fearful convulsions. In the other, death results more from general loss of blood, or what is the same thing, of its fluids, and from consequent gradual exhaustion. It is evident if the two conditions here described, both of which are termed cholera, differ so essentially, the treatment must equally differ. In the primary disease, to relieve congestion and restore the powers of the blood-vessels is the great object in attempting cure; in that which succeeds to dysentery there is no congestion to relieve; instead of the blood filling the great veins almost to bursting, and the heart struggling with an oppressive load of blood, its action is here feeble and hæmorrhagic, and the body is so rapidly drained of its vital current, that the power of reaction is generally gone by the time the collapse begins. In the first the purging is a mechanical effect, and a natural mode of relief to congestion, and ceases as soon as congestion has been relieved, and the circulation restored; but in the other purging is an energetic action and the very essence of the disease, and if the patient be restored from the condition of collapse thus induced, the dysentery renews its course, and is only changed again from

passive exudation to its former activity of secretion. Instead, then, of exerting ourselves to excite the activity of the capillary circulation in the dysentery, which leads on to cholera, we must employ every means in our power to subdue excessive action, lest the powers of life should be so reduced by the active over-purging as to bring the system within the influence of the cause of cholera. This compound disease then must be treated as dysentery, wholly independently of its tendency to terminate in cholera, and this must be pursued as far as possible, even after collapse has commenced, for should we succeed in rousing the patient from collapse, the previous active purging returns along with restoration of the functions of the vessels. The treatment that has appeared to me the most effectual in producing the desired effect in this disease has been the frequent repetition of emetics of ipecacuanha and tartar emetic, or a large dose of calomel mixed with a grain of tartar emetic, aided by frequent injections of acetate of lead and opium, sinapisms, warmth, &c. Constant persistence in the use of emetics, is the only means by which I have seen patients permanently recovered from the stage of decided collapse, in this form of the disease.

I am inclined to believe that bilious disorder is the cause of the almost universally prevailing diarrhoea, and the effect of some epidemic cause on the circulation of the liver. The motions remain long clay-coloured in almost all affected, whether severely or slightly, until restored to a more natural condition by a smart mercurial purge or alterative treatment, and with regard to the treatment of acute dysentery, I have met with no essay so practically excellent as that contained in Mr. Twinnings work "On the Diseases of Bengal."

According to my experience the appearance of the tongue affords the most unerring signs for the guidance of the treatment to be pursued, and the most useful symptoms in distinguishing how far diarrhoea depends on dysenteric irritation or on venous congestion. If cholera be in the neighbourhood, and the tongue be clean, pale, and bloodless, cessation of diarrhoea and uneasiness will almost invariably follow the administration of a few drops of muriated tincture of iron and two grains of quinine, but if the tongue be red it will be attended with the opposite effect. When simple dysentery merges into collapse, the tongue often becomes quite clean and pale, and the chalybeate is then highly necessary; but if any pale mucus or fur remain attached to the centre of the tongue during the collapse, and it be not quite bloodless, we may be pretty confident that we shall find the evacuations putrid, and no advantage is to be expected from the chalybeate in that case.

So far as my own observations have extended I can arrive at no other conclusion than that the disease so prevalent since the beginning of August, has been a species of English cholera or dysentery, dependant on disorder of the bilious secretions, which are thus rendered drastically purgative instead of gently aperient as in health. That this is frequently united with the causes of putrid dysentery or fever, in other words, with the effects which putrid particles absorbed into the

blood produce on the fluids of the body, but more especially on the intestinal mucus altered by dysentery; that the disease then becomes much aggravated—the symptoms such as have been described above—and highly contagious. That epidemic dysentery with or without this putrid character exists generally throughout the country, whereas the cause of epidemic cholera is not so universally spread, but that where the two coexist, the former acts as a powerful predisponent to the latter. That previous to August the cause of cholera existed in many places, independently of that of dysentery, and frequently produced the true primary disease, but that since that period the great majority of cases of collapse have been induced by the predisposing dysenteric derangement, without which the cause would have been insufficient to produce its effects on any large proportion of the population. Now, with regard to the fungous, animalcular, and other popular theories, I think it possible that, if the observations recorded are not fallacious, they may be the results of that increased tendency to decomposition of organic matters, where cholera prevails, which was noticed in Mr. Whitbread's brewery in 1833, during the week that cholera was at its height in London, for porter then fermented in a third less time than usual. Therefore, if any fungi or sporules are found to be really peculiar to the diarrhoea of cholera I should incline to believe that this can only be the case in the evacuations of those labouring under the putrid form of disease above described, and not from the primary disease or even from those in whom collapse was preceded by simple dysentery. There exist, I think, good reasons for believing that active putrid particles applied to the mucus of the intestines in life, especially if this be altered in its character by dysentery, are capable of very rapidly converting that mucus to the state of a putrid irritant, and that in fact, these theories of the cause of cholera may be the result of a very common error, that of mistaking effects for physical causes.

I am, my dear Sir, yours faithfully,

CHARLES W. BELL.

W. Hall, Esq., M.D., Exeter.

Hospital Reports.

ESSEX AND COLCHESTER HOSPITAL.

CLINICAL REMARKS ON A PECULIAR CASE OF DEFECTIVE UTTERANCE, UNDER THE CARE OF P. MARTIN DUNCAN, M.D., F.G.S., PHYSICIAN TO THE HOSPITAL.

CASE.

Lucy Halls, a tall, well-made, married woman, 26 years of age, became one of my patients in the Essex and Colchester Hospital on March 25th, 1849. She has had the usual diseases of childhood. Her catamenia appeared when she was fourteen years of age. She married two years ago, and has had no children, nor is she now pregnant. There is no insanity in her family.

Her head is well formed; and she is generally quick and intelligent. She has always lived well and regularly. Has been tolerably free from mental anxiety, and has never had hysterical symptoms of any kind. There is a cicatrix on the left trochanter, and she remembers the existence of an abscess there many years ago. Has never had fits during her infancy, and indeed has enjoyed good health up to a few weeks since, when her appetite failed her, and her menstrual flux diminished in quantity and colour. After awhile she complained of nausea, headache, and occasionally of giddiness; she became pallid, and after these symptoms had persisted for fourteen days, she suddenly fell down senseless, and remained so for a few minutes. She was not convulsed; her face was flushed, and on her recovery she suffered from severe frontal headache. In the course of a day or two, the headache still persisting, she had another fit, lost her consciousness as before, and was not convulsed, but on recovering found that her speech was affected in a peculiar manner. A third fit of like character enhanced the last-mentioned symptom, and she then came under my care.

March 25, 1849.—Her general appearance is good; she is upright and stout; has not, nor has she had, any skin-disease; countenance depressed and rather anxious; her lips are pale, and she has the aspect of slight general anæmia; she complains of constant intense frontal headache, more acute on the left than on the right side; of dizziness, and of a sensation of over-powering debility; her headache prevents her from sleeping, and is increased by the horizontal posture; she has neither tenderness of scalp nor facial paralysis; the tongue is protruded, retracted, and moved in every direction with the greatest facility, but whenever she attempts to utter a syllable, however simple, its tip is forcibly directed against the fore-part of the palate, is retained there but for an instant, and as rapidly returns; her language is, therefore, a succession of "d's" and vowels. "Yes, sir," is rendered "ded, dud." "Pain in my head, sir," is made into "did, did, did, ded, dud;" one word following readily, and not too rapidly, after the other. "Hospital" is "dod, did, dud," in her method of pronunciation; and any polysyllable is a jumble of d's and vowels. She can pronounce neither gutturals nor sibilants. The word "why," which requires the use of the lips only, she can enunciate tolerably well, but it is frequently called "wid;" indeed there is a tendency on her part to end all syllables by a "d, or t." She tries to pronounce correctly, and cries bitterly after her unsuccessful attempts. She has neither startings, nor paralysis of any of the muscles of the limbs or trunk; her senses are intact; she has never suffered from globus hystericus, or from spinal tenderness; nor can any structural changes be distinguished about the tongue, jaws, or neck; she has neither leucorrhœa nor pain in the side; heart and lungs healthy; urine scanty and highly lithic; appetite none; bowels constipated; tongue flabby and foul; no thirst; no pain after eating; pulse 96, full and excitable. Ordered low diet. Blister to left temple. R. Pil. Hydrarg., gr. v., omni nocte. Haust. Sennæ bis.

26th.—Better; headache less; bowels moved; articulation the same; pulse 96. Pergat.

27th.—Headache nearly gone; articulation worse, and as she is loud-voiced and loquacious, can be heard—"did, dod, dud, did," and so on—all over the ward.

28th.—Much the same. Pergat.

30th.—Headache has left her, the appetite is returning, the bowels are well open, the urine is no longer loaded with lithates, she is paler than she was when she was admitted, and suffers from slight nervous palpitation. Middle diet. R. Ferri Sulph., gr. ij; Ammon. Carb., gr. v.; Mist. Gent. Co., oz. j., ter die.

April 7th.—During the past week her general appearance has improved, her appetite is still not over-good, she no longer complains of headache, but her speech is no better. R. Quinæ Sulph., gr. ij; Inf. Rosæ, oz. j., ter die.

8th.—Slept badly. R. Pil. Saponis Co., gr. v., hac nocte.—Rep. Haust. ter die.

11th.—Is better in every respect, her speech alone excepted; bowels slightly constipated; has excited herself a good deal on account of her not being able to make herself understood by her friends, and is slightly hysterical. R. Pil. Hydrarg., gr. iij; Ext. Col. Co., gr. v. ft. pil. ij., hac nocte sumendæ.—R. Tinct. Assafoetid., dr. ss.; Tinct. Valerian. Co., dr. ss.; Ferri Sulph., gr. ij; Mist. Camph., oz. j., ter die.

13th.—Much the same; hysterical symptoms gone; speech not improved; is still pale; tongue clean; bowels open; pulse 84. R. Ferri Sulph., gr. ij; Mist. Camph., oz. j., ter die.

May 8th.—No improvement since the last report; articulation the same; is stronger, and has more colour. R. Strych., gr. 1-10th; Sp. Vin., dr. j.; Mist. Camph., oz. j., ter die.

9th.—Much the same. Pergat.

12th.—Articulation decidedly improved; she can occasionally pronounce a sibilant sound. Strych., gr. ½; Sp. Vin., dr. ij; Mist. Camph., oz. j., ter die.

14th.—Speech much improved; she can say "yes sir, why, and could," much better, but after awhile returns to the "did dud." Pergat.

17th.—Improved greatly; catamenial flux more profuse; appetite good; spirits excellent; still some impediment in her speech. Pergat.

22nd.—Speaks fluently, continuously, and without the least impediment. Omit Med. She is now in good health, and has perfect speech.

REMARKS.—In this case there evidently was no aphonia, the chordæ vocales accomplished their functions in a perfect manner, as did also the muscles of the oral sphincter. The tongue was the offending member, that delicate approximation of its tip to the fore-part of the palate, which is requisite for the production of sibilant sounds, no longer existed; a violent, sudden, and ill-directed effort, propelled the tongue in the proper direction, but the want of the power of adaptation prevented the production of the wished-for sound. Words beginning with a hard "c or k," as "could, cork, kiss," which require the back part of the tongue

to be impinged for an instant against the corresponding part of the palate, could not be pronounced by my patient; she had not power whilst speaking to elevate the back part of the tongue; on the contrary, the above-mentioned words were rendered "dud, dod, did," the top of the tongue being employed, yet when not speaking she could move the tongue in all directions. Speaking in a whisper was accompanied by the above-mentioned odd ill adaptation of the muscular effort.

In order to have perfect voice and perfect enunciation we require a perfect co-adaptation and co-ordination of function of the muscles of expiration—of the chordæ vocales—muscles of the soft palate—muscles of the tongue, and of those muscles of the face which have to do with the oral opening.

In this case the functions of all the structures were perfect, with the exception of those of the muscles of the tongue; there was a want of the power which controls and directs the muscular efforts of the tongue during the act of speaking; yet all was well when the tongue was to be propelled or retracted, without speech being attempted.

Now, the tongue is protruded by the combined action of the *genio-hyo-glossi*; its top is propelled against the fore-part of the palate, by the same muscles, assisted in a certain degree by the *linguales*; it is retracted from its elongated condition by some of the fibres of the *genio-hyo-glossus* of each side, by the *stylo-glossi*, and when the *os hyoides* is fixed, by the *linguales*. When the tongue is altogether within the cavity of the mouth, the *genio-hyo-glossi* have nothing to do with retraction; this is left to the *stylo-glossi*, assisted occasionally by the *linguales*. The ninth nerves supply the *genio-hyo-glossi* and *linguales* muscles; the *stylo-glossi* are supplied by branches of the *glosso-pharyngeal* nerves.

The peculiarities of this case were excess of action of the propelling muscles, and a want of power in the retracting muscles of the tongue; most likely the first condition was an effect of the second,—paralysis of one set, and necessary (for their antagonistic force was lost) increased action of the other set of muscles. But this was only the case during speech; there were no evidences of paralysis of any of the muscles of the tongue at any other time; on the contrary, paralysis of the *stylo-glossi* can only be the result of lesion, either at the origin, or during the course, of the *glosso-pharyngeal* nerves. Can we imagine such a paralysis or such a lesion to exist at one time and not at another?—not to exist during ordinary attempts at exertion, and to exist when the action required was more or less automatic and co-existent with a combination of several functions. Can paralysis of a muscle exist during an effort of speech, and not at any other time, or during any other occupation? It did in this case, and I believe the following to be the correct explanation:—A certain amount of nervous energy is required for the production of the usual muscular efforts of propulsion, retraction, and rotation of the tip of the tongue; also for the impinging the back part of the organ against the palate; but a much greater amount is required to

regulate the delicate movements employed during the act of speech. A nerve injured to a certain extent will produce one series of phenomena, but has not, or cannot, transmit, as the case may be, influence enough to produce a more complex and exacting series.

To produce a muscular effort, a certain amount of grey globular nerve matter is necessary to originate, and a perfect system of nerve tubes to conduct, the requisite nervous force, the more complete the adaptation of the originating with the conducting nervous structures, the more complete will be the powers of the muscle to which they bear relation. Every collection of nerve fibres has a certain definite number or quantity of the globular nervous element in relation with it, and the loss of any portion of this last will render the nervous influence of a certain number of fibres weaker, they will have less nervous force to conduct; they may be able to stimulate a muscle to certain exertions, but not to others, requiring more nervous energy.

The branches of the *glosso-pharyngeal* nerves which supplied the *stylo-glossi* muscles in this case, were able to stimulate them to certain, but not to special and more exacting efforts, on account of a loss of the proper quantity of grey matter usually existing at their roots or points of origin. How came this loss? The patient had three fits after suffering from some considerable constitutional disturbance; the first fit resembled what is termed fugitive apoplexy, the second and third resembled the first in character, but were more severe, and left behind them that lesion of the brain which prevented the *glosso-pharyngeal* nerves from influencing the *stylo-glossi* in a proper and sufficient manner. The after symptoms were not sufficiently severe to lead one to believe that a clot ever existed. I feel inclined to refer the fits and the slight structural change to one of these local congestions, which are by no means unfrequent in other organs besides the brain in women, whose catamenia are not as they should be, and who are more or less anæmic. Sufficient injury could be done by the long-continued pressure of dilated capillaries upon the nervous substance within their meshes, to account for the loss of the usual and sufficient power.

I was led to believe from the commencement of the case that it was not of an inflammatory kind, and that some localized congestion alone existed. Purgatives relieved the most distressing of the head symptoms; and the tonics, which were subsequently administered, although they increased the general tone of her health, yet had no influence upon the affection of the speech. Strychnia was then administered, and she soon felt the beneficial effect of it; the dose was increased, and she rapidly regained the controlling power over her tongue. She suffered from no startings whilst she was taking the strychnia, which in her case, as I believe in all others, acted upon that part of the brain which had suffered more or less structural change.

We notice that in cases of hemiplegia, depending upon non-inflammatory softening of the brain, or following upon an apoplexy, (the clot being supposed absorbed,) if strychnia be exhibited, the startings pro-

fluenced by it are seen in the paralyzed limbs first; the drug appears to fix its action upon the diseased, rather than upon the normal structures. It is the greatest restorer of nervous energy we possess.

Provincial Medical & Surgical Journal.

WEDNESDAY, NOVEMBER 14, 1849.

It is a fact not less true than humiliating, that a discussion on medical subjects seldom arises, that it is not tarnished by an admixture of personal hostility. This cannot be attributed to the nature of the subject discussed, for there is, on the contrary, every reason why an inquiry touching the welfare of humanity should be conducted with temper and good feeling. The explanation is to be found in that almost morbid jealousy which would seem to be inseparable from the practice of the healing art in the present day, and which leads many in the spirit of an ungenerous rivalry, to impugn the motives, and even affect to doubt the integrity of any neighbour, who, either by superior attainments or the force of accidental circumstances is led to assume a position which brings him prominently before public.

The exhibition of this pitiful spirit has been witnessed in the instance of many of the discoveries of recent times, nor has it been confined to men, who, from a want of breeding or a defect of early education, might be supposed to be destitute of those nicer feelings of courtesy, which should be the distinguishing mark of all who venture to enter the profession of medicine; but it has been too often exhibited by others, who, from their social and professional position, might be expected to manifest more elevated sentiments. Be this as it may, we do not hesitate to assert, that to the frequent betrayal of these unworthy feelings, is to be traced not a little of the disrespect which medical men meet with as a body, from the more refined section of the public, which, however, willing to excuse such emotions in the case of rival tradesmen, refuses most justly to acknowledge them as consistent with the dignity of a learned profession.

We were led to these remarks from observing the tone which pervades certain recent communications respecting Dr. Ayre's plan of treating cholera by frequently-repeated small doses of calomel. Of the method itself we are in no haste

to form an opinion; were we disposed so to do, we might perhaps like to know a little more of the exact condition of each case at the time the treatment was commenced, and might inquire with some of his opponents, how it happens that in the town in which a treatment pronounced eminently successful originated, the mortality has been more frightful than even in the metropolis. But our present object is not to canvass the treatment itself, (this we may possibly do on a future occasion) but to record our reprobation of the spirit in which the discussion has been conducted. It is evident that the opposition is rather to the man than to the method; the object rather to detract from the merit of the practitioner than to exhibit the fallacy of his system as a matter of medical science. To us the perusal of such ungenerous controversies has ever been painful, and we are confident that those of our readers who are imbued with the principles inculcated by this Association, will feel as we do, that it is in vain we endeavour to maintain the dignity of our profession, while such examples of undignified conduct are continually thrust before public notice.

Let us hope that in future, instead of insulting insinuations on the one hand, and angry rejoinders on the other, Dr. Ayre and his opponents will favour the profession with the facts upon which these opinions are based. Let Dr. Ayre give us a statement of his cases, fatal as well as successful, and let Dr. Horner, Mr. Gibson, &c., do likewise; the profession will then be in a position to judge of the true merits of the method advocated. Should the result be unfavourable, Dr. Ayre need not be ashamed to own that he has been too enthusiastic, and that later experience has controverted or modified his earlier views. A candid avowal of error will only raise him in the estimation of the right thinking portion of his brethren.

If, on the other hand, the results of a faithful statistical inquiry, shall, as we are not altogether unprepared to find, establish the system of small and frequent doses of calomel, as the most certainly successful treatment previously as well as subsequent to collapse, Dr. Ayre will be entitled to such gratitude from his fellow-creatures as will amply recompence him for the ordeal to which he has been compelled to submit.

HAVING in a former number made the "fungoid" theory of cholera the subject of Editorial remark, we feel it necessary to return briefly to its consideration, in consequence of recent proceedings connected with the supposed discovery. We then thought right to express our doubts as to the value of Messrs. Brittan and Swayne's researches, and did not hesitate to propound certain objections which appeared to us to be *prima facie* hostile to their reception. The reserve thus exhibited was not, as it turned out, quite uncalled for, inasmuch as certain communications have been made subsequently, which must, if trustworthy, not only demolish the theory, but ever call in question the validity of the facts.

But a short period had elapsed since the announcement of the fungoid cells as peculiar to choleraic evacuations, before bodies identical in appearance were found in other secretions, and in other diseases; and when present in the cholera stools were seen not to be so on their first dejection, but to become apparent only after the lapse of a few hours. In addition to this we also find an eminent microscopist, Mr. Busk, distinctly denying the *peculiarity* of the cells, but maintaining on the contrary, that one variety was no more or less than the common uredo or smut of wheat, and the other kind simply modified blood discs. Lastly, we have the authority of the Royal College of Physicians, adducing evidence on the faith of its microscopical committee, tending in more direct terms to exhibit the fallacy of the new theory.

One cannot help feeling some regret that observations so honestly made and candidly stated, should be apparently doomed to such speedy discomforture; but the lesson may at least be learned, that the science of medicine is less than any other likely to be advanced by hasty generalizations; that it is on the contrary a science which, *par excellence*, requires the exercise of the closest induction, while flights of fancy, even the most brilliant, will ever fail to inscribe in its annals the valuable and the true.

It is currently reported that the Council of the College of Surgeons came to the decision, on Thursday night, by a large majority, to apply to the Crown to amend the Charter of 1843. It is said to be intended to extend the Fellowship to all members of twenty years' standing.

Reviews.

A Dissertation upon Dislocations and Fractures of the Clavicle and Shoulder-joint. Being the Jacksonian Prize Essay for 1846. By THOMAS CALLAWAY, F.R.C.S., Demonstrator of Anatomy at Guy's Hospital, &c. &c. London: S. Highley, 1849. 8vo, pp. 178.

It happens unfortunately for the usefulness of the above monograph, that it was written at a time immediately preceding the introduction of chloroform as an auxiliary in the reduction of dislocations. The effect of this powerful agent in relaxing the muscles concerned in maintaining the displacement is so great, that we suspect all the rules must be remodelled which are laid down by Cooper, Dupuytren, and others, for the guidance of the surgeon in determining on the period when all hope of replacing a bone in its socket should be abandoned. It is, therefore, a subject of regret that, in the interval between the years 1846 and 1849, (the respective periods of presentation to the College of Surgeons and of general publication,) Mr. Callaway did not make the addition to his work, which would have rendered it all that could be desired. But instead of this, we find merely a short notice of the fact—that chloroform or æther may be used—in a foot-note at page 118, altogether extending to only eight lines. This is the more to be lamented because the injurious effects of either antimony, blood-letting, or tobacco, are sometimes so great as to make it highly desirable to abandon their employment if an efficient substitute can be found; and from personal experience, as well as from published reports, we can have no doubt, not only that these anæsthetic substances may be equally useful, but that many cases of old dislocation which would formerly have been abandoned, will be found to be reducible with the aid of chloroform.

The arrangement of this treatise is of a very serviceable character, as the reader is at once enabled to get at any information he may require, and as a work of reference, combining all the information separately published up to the year 1846, together with many original cases, it will be found of great use to the profession.

Mr. Callaway has been at great pains throughout his dissertation to do away with discrepancies already existing, and to make plain to every one what had previously been wrapped up in ambiguous language. As an instance of this, in which he has been eminently successful, we select the following passage:

"No slight degree of complexity appears to exist upon the subject of dislocations of the scapulo-humeral articulation; and although books, brochures, and letters innumerable have been written upon the subject, it is

still veiled in much ambiguity. Had this diversity of opinion been confined to a difference in the nomenclature, it would have been a no very herculean task to have reconciled the apparent discrepancies; but the evil is of far greater magnitude, for it is on the actual occurrence of individual dislocations that much controversy exists, *e.g.*, the two chief modern French surgeons, MM. Malgaigne and Velpeau, are not agreed as to the existence of a dislocation directly downwards.

"I believe this disagreement among surgeons results from two principal causes. And firstly, from the different views taken of the axillary space in its dissection; by some the scapula is drawn from the side, and, when dissected, almost forms its external boundary; while to others the anterior costa of the scapula seems to form its posterior boundary. Under such circumstances, the same dislocation is not likely to be described alike, or called by a similar name, by the two individuals.

"Another, and very principal, cause of the perplexity is, that the injury is described, and derives its name, at one time from its relation to the glenoid cavity; at another from the position which the head of the bone holds with respect to the processes of the scapula or the surrounding muscles; whilst a third appears to be a combination of the two."

On the long disputed point of fracture of the cervix scapulae, Mr. Callaway expresses strongly his opinion against the possibility of its occurring under ordinary circumstances, founding his conclusion upon the following reasons:—

"The great strength of the bone at this part, the depth of its situation, and the protection it receives from surrounding structures, all tend to diminish the probability of the accident; should it occur, it must result from most direct violence, as a grape-shot passing through, or a cart-wheel passing over it; all indirect force, as *contre-coup*, &c., is quite out of the question in the production of the accident; and I should, *primâ facie*, be sceptical as to the existence of a fractured cervix scapulae, were the injury said to be the result of a fall or blow,—grounding my opinion on the natural solidity of the part, its protected situation, and the extreme mobility of the bone."

The first edition of this essay will, we have no doubt, be rapidly exhausted, and we would then recommend the author to add to his reputation already obtained, by remodelling the work on the point to which we have already alluded.

The Address delivered at the Anniversary Meeting of the Worcestershire Natural History Society, on Thursday, September 27th, 1849. By GEORGE WOODYATT HASTINGS, of the Inner Temple. Deighton and Co., Worcester; Churchill, London. 1849. Pamphlet, pp. 16.

THE above Address, though on a subject only collaterally allied to medicine, will be read with the

greatest interest by the members of this Association, if only from the fact of its being the production of "founder's kin;" but its intrinsic excellence is so great, the style is so pure, and the object for which it pleads so eloquently is so praiseworthy, that we forget in reading it the original motive for its perusal, and are tempted to return to it, from the conviction that it will repay us for a second examination. The following extract places the subject in a light which displays its usefulness even more plainly than its other and more evident qualities:—

"Let it be remembered that institutions such as this are eminently calculated to supply the deficiencies in our national character. We have ever made it our boast to be a domestic people, and have undoubtedly acquired those virtues and excellencies which spring from family cultivation; but we should sometimes reflect that something more is requisite to carry out the character of a nation, and that if we would attain to high excellence as a State, we must encourage the principle of citizenship. I heard one of the deepest thinkers that the freedom of the West has yet produced, enlarge eloquently upon this topic, and show that a closer union among all classes, and a policy which would cause that abundance of wealth, now lavished on private luxury, to flow forth in public benefits, were the only remedies under Providence, for the evils impending over modern civilization. How large a portion of our history passed over without any outward signs that Englishmen lived for each other as well as each man for himself—that the nation so renowned in commerce and arms was indeed a society of citizens, and not a mere aggregation of individuals! Many writers complain bitterly of the selfishness of the present age, yet assuredly without justice to the nation at large, if we consider the amount of private munificence, and the exertions now begun to be made with a more united aim; but may we not ascribe many of the faults which deform our character, and many of those national calamities which men almost desparingly strive against, to that isolated system which has made our very charities bear the aspect of indifference, and cramped the unparalleled efforts made to stem the tide of ignorance and vice? Happily this reproach is being fast done away with, as English society wakes to a conviction of the truth, and this building, among others, shows that the chief city of Worcestershire will exhibit henceforth, among lines of edifices devoted to private life or individual enterprise, some token of united sentiment—some possession, which her citizens of all classes and all shades of opinion can enter and claim as their own—a resting-place where, amid the struggles and competition of daily life, they can stand and forget, at least for an hour, all other emotions than those which bind men together in the bond of brotherhood."

We strongly recommend all those who already take an interest in this attractive subject, to read the Address; and if those who are not already naturalists will only do likewise, they can hardly fail to become lovers of the science theoretically if not in practice.

INQUIRY ON CHOLERA.

We are induced to republish the questions in the inquiry on cholera, that they may not escape the attention of those who have been engaged in the treatment of the epidemic.

QUESTIONS.

1. During the prevalence of the epidemic, has your own neighbourhood, town, or district, been *exempted* from the visitation? If so, can you mention any local circumstances which may account for the exemption? Was the district healthy during the visitation of the cholera about the year 1832, and did circumstances then exist which may be supposed to have protected it?

2. If the cholera* has appeared in your district, how many cases have you seen;—how many of these have been fatal?

3. When did the disease break out, and how long did it prevail? Please to state generally, whether many persons were simultaneously attacked or otherwise; and whether it commenced contemporaneously in more than one *site* in the same town or district, or whether it appeared to spread from one point only. Were there any peculiar circumstances observable in its local character, or in the course or direction of its advance, which may throw any light upon the important question, whether the disease be of a *contagious*† nature or otherwise?

4. Have you invariably been able to trace the disease to *local impurity of the atmosphere* or have you seen it attack persons living in a pure air, apart from graveyards and other sources of putrefaction, in well-drained and well-ventilated dwellings? In cases of the latter description, if any have been observed, has there been any intercourse with the sick which may tend to establish the doctrine of *contagion*, or the reverse?

5. Did the cholera appear in your neighbourhood *with* or *without* the general and contemporaneous appearance of the *milder forms* of disease—diarrhoea, bilious cholera, &c.? Has dysentery or typhus been prevalent, or otherwise?

6. Were its ravages indiscriminate as to personal vigour, age, sex, station, occupation, &c.; or might the attacks be traced to some *predisposing personal cause*,—as weak bowels, intemperance, debility, fear, errors in diet, uncleanly or sedentary habits, or impaired health from any cause?

7. Were “premonitory” symptoms of general occurrence, or did the disease frequently appear suddenly in the malignant form, with violent cramps, vomiting and purging, “rice-water” dejections, and rapid collapse?

8. Did the symptoms differ from those generally observed and frequently described? Had the disease any peculiar type either of mildness or malignity?

9. Are you aware of any exempting circumstances of any description, which have uniformly protected

certain individuals from the disease,—such as trades, habits, diet, &c., not inclusive of local habitation?

10. Can you throw any light on the *physical origin* or remote cause of the recent or former visitation? Are you able to say, from your own observation, that the general symptoms and history of both are similar? Have you instituted any researches into the density, humidity, temperature, or electro-magnetic phenomena of the atmosphere? Have you observed the progress of the cholera to be arrested by storms, wind, or rain?

11. Have you made any *post-mortem* examinations of fatal cases of cholera, and with what result? Do you know of any circumstances which justify the immediate interment of the dead? Did you ever observe cholera patients shew signs of organic life for hours or days after apparent death?

12. Can you describe any method or principle of *TREATMENT* which has proved successful in so large a number of cases of *cholera*, as to commend it to universal adoption? If so, has not the method frequently failed in other hands, and can you explain the cause of failure?

13. What mode of *treating* the epidemic *diarrhoea* and premonitory symptoms generally have you found most successful?

14. Can you suggest any means of preventing or arresting the spread of the disease, in the event of any future outbreak?

15. What is your opinion as to the propriety of removing the inhabitants, who have not taken the disease, from the infected dwellings to houses of refuge, in situations where the presumed causes of the disease are not in operation?

Proceedings of Societies.

RETROSPECTIVE ADDRESS,*

DELIVERED AT THE EIGHTH ANNIVERSARY

OF THE

READING PATHOLOGICAL SOCIETY,

AUGUST 8TH, 1849.

By WILLIAM B. YOUNG, Esq.

III.—DISEASES OF THE CIRCULATING SYSTEM.

Aneurism of the Abdominal Aorta.—Two specimens of this disease have been presented by Dr. Woodhouse during the last year. The first was taken from a man who died in the Royal Berkshire Hospital. For a fortnight before his admission he had been under the care of Mr. May, complaining of the symptoms of lumbago, who prescribed the usual remedies for that complaint. Attention was not directed to the abdomen after his admission to the hospital, and the cause of the pain in the loins was not discovered till death had revealed the disease of the artery. He expired suddenly after suffering very violent pain in the epigastrium for 24 hours.

* Continued from page 606.

* In using the term *cholera*, or in responding to any inquiry concerning it, please to adhere strictly to the definition in the number of the *Journal* for September 5, p. 490.

† A house or district, may be *infected*, so as to spread a disease not strictly *contagious*. Respondents are therefore requested to confine the latter term to evidence of communication by personal approach or contact.

On a *post-mortem*, a large quantity of blood was found effused into the abdominal cavity, and impacted in the lesser omentum. The tumour burst by ulceration, and not by sloughing, as in external aneurism.

The second specimen was one which was sent to him by Dr. McIntyre, of Odiham, for exhibition to this Society, and presented similar features. While mentioning the obscurity of the symptoms of aneurism of the aorta, Dr. Woodhouse referred to a case which occurred six or seven years ago in this hospital, in which the arch was the seat of the dilatation, which, by pressure on the recurrent branch of the left par vagum, produced paralysis of that side of the larynx, and presented all the symptoms of ulceration of the larynx and vocal chords.

Enlarged Heart.—Mr. Walford presented a specimen of enlarged heart, with considerable ossific deposit around the roots of the aortic valves, and gave the following history of the case:—

Phyllis Neilder, aged 22, a laundress, had been ill for some years. The symptoms were,—a frequent pulse, shortness of breathing, at times amounting to orthopnoea; difficult decubitus, with a severe neuralgic pain in the head and upper extremities, which at last came on every evening. Her death was hastened by an attack of pneumonia, which supervened on taking cold. She died on the 7th of May.

Post-mortem 24 hours after death.—Serous effusion to a slight degree in the abdominal and thoracic cavities, and also in the pericardium; carnified condition of the lungs, with a breaking down in the tissue of the lower lobe of the left, and middle lobe of the right lung; heart enormously enlarged, especially the left ventricle, with ossific deposit to an unusual extent in the course of the aorta; the walls of the right ventricle thinned, and its cavity enlarged; liver enlarged, and presenting the appearance of a nutmeg when sliced.

The chief interest of the case consisted in the large size of the heart, the slight degree of dropsy resulting from it, and extensive ossific deposit in so young a subject.

IV.—DISEASES OF THE DIGESTIVE SYSTEM.

We now come to the diseases of the digestive system, and the first subject which I shall bring before you under this head is *cholera*, which from its great prevalence during the last year, and at the present time, is one of great importance. This, I trust, will be a sufficient excuse for the lengthened report I have given of our discussion upon it.

On the 23rd of August, 1848, Dr. Cowan read a paper “On Cholera,” which contained the valuable personal observations of Lieutenant-General Welsh, who, during his long residence in India, had many and ample opportunities of witnessing the progress and treatment of this disease. His remarks and treatment of this formidable malady would do credit to any professional writer; while his zeal and philanthropy in his care and management of the sick do honour to his benevolent heart. Dr. Cowan appended some valuable comments of his

own, which, together with the paper, have been published in the *Proc. Med. and Surg. Journ.*, Nov. 1st, 1848.

On the same evening, Mr. Jeston related a case which supported his views of the nature and cause of cholera. It was that of a man who was seized with all the symptoms of cholera, and died in 48 hours, from having inhaled the miasmata arising from a foul tank which he had been employed in cleansing. He also made some remarks on the epidemic, as it occurred in Henley, in 1832. It lasted about six weeks, during which time 41 cases occurred, of which number eight proved fatal. The first cases were treated with stimulants, and were lost; the subsequent ones with ipecacuanha, as an emetic, calomel and opium, and cold water, (*ad libitum*), and recovered. In some cases a bleeding to 14 ounces was employed, where the constitution would bear it.

Mr. Cox read a printed paper by Mr. Edward Joseph, who recommends the treatment by turpentine in the form of enemata, and by frictions of the same, with equal parts of olive oil every half hour. When the pulse became full, 14 ounces of blood were extracted from the arm, after which salines, consisting of Sodæ Sesquicarb., Magnes. Carb., and Potass. Chlorat., were given every quarter of an hour.

Mr. Bulley read a “Case of Asiatic Cholera,” which occurred in 1832, in which stimulants, with turpentine poultices to the spine. Hydrag. cum Cret., with Dover’s powder and saline effervescing draughts were given with success. This case, with Mr. Bulley’s remarks, has appeared in the pages of the *Medical Times*, Sept. 2, 1848.

Mr. Harrinson read a “Case of Morbid Poisoning,” which illustrated his notions of cholera. A woman who had been in attendance on a man dying from disease of the lungs, and from whose body there proceeded a most offensive effluvia, was suddenly seized with great prostration. This was followed by severe diarrhoea, violent headache, with delirium, a dry tongue, with intense thirst, and she exhibited a dirty jaundiced appearance, an anxious and distressed countenance, and petechial spots scattered over the body. A saline mixture, with ammonia and hyoscyamus, were given. She was also ordered to take a few oranges, and to have a free admission of pure air, under which treatment she became convalescent in a fortnight.

In commenting on this case, Mr. Harrinson made some remarks on the influence of a morbid poison on the human constitution, and the means by which it is carried out of the system. In applying his remarks to the subject of cholera, he went through a *resumé* of all the plans and remedies proposed for its treatment, classifying them under an ingenious theory, viz., “the treatment by elimination.” He disapproved of the sudden checking of the diarrhoea, unless the compensating action of the skin was established to divert the channel of the morbid stream. For this reason he commended opium, not so much for its checking the diarrhoea, as for its aiding by its sudorific powers, to rid the system of the cause on which the diarrhoea depends, as Nature could not support the exhausting effects of its expulsion by the natural way. He con-

demned its use in large doses, as it paralysed all the vital functions, and stopped all the secretions and excretions. He also recommended mustard emetics at the commencement. Diaphoretics, diuretics, and mercury in moderate doses, with the same view. The hot-air bath, or a warm wet blanket might be used to restore the temperature of the skin, and stimulants to rouse and sustain, and not by their reaction to repress the vital powers. In the collapsed stage he suggested the inhalation of oxygen gas, properly diluted.

Dr. Cowan expressed his concurrence in the views entertained by Mr. Harrinson, and thought the proper way was to look at it as a general poison: the great difficulty was to adjust the remedies to the proper stage of the disease. He thought the best treatment was to give a mustard or other stimulating emetic, at first a full dose, afterwards smaller doses, of calomel and opium, and diluents consisting of salines or effervescing draughts, with largely diluted and animalized infusions.

Mr. Walford read an elaborate paper on the "Origin, Nature, and Treatment of Cholera," in which he ably advocated the views of Dr. Fletcher on its pathology. This paper, together with the remarks of the author, was published in the *Prov. Med. and Surg. Journ.*, April 18th, 1849.

Dr. Wells delivered his views of this disease by reading a set of propositions, of which the following is the substance:—He considered that it was caused by a miasmatic poison, which acts primarily and chemically on the blood, destroying its vitality, and causing it to separate into its constituent parts, of which the serous portion is expelled with the evacuations from the stomach and bowels, while the coagulated portion remains, engorging the internal organs, and that the non-secretion of bile, urine, &c., is owing to its being too thick to circulate through the secreting parts of the glandular apparatus. In the *treatment*, he proposed the free use of diluents, which should contain solutions of the alkaline carbonates. He considered that opium is beneficial in the first stage of diarrhoea, which it checks, but not in the second or collapsed stage; that calomel is beneficial, not so much by its particular power of producing a secretion of bile, as by its general influence on granular structures in a state of engorgement, and that astringents, stimulants, stimulating embrocations, and hot-air baths are very valuable as adjuvants; but that the primary object of diluting the blood should never be lost sight of.

Mr. Vines alluded to the great difference of opinion which existed with regard to the use of opium, some recommending it in the incipient, others giving it in large doses in the stage of collapse. He thought it useful in the early stage as an astringent, and in the more advanced stages, marked by extreme prostration, as a stimulant. He thought it important to ascertain whether English and Asiatic cholera are identical, and was disposed to believe that they are different types of the same disease, varying in mildness or intensity. He also thought that cholera bore some analogy to fever; thus, in the simple form the quantity of poison taken into the system is small; in malignant cholera, as in typhus,

the dose is proportionally greater and more virulent. Another sign of analogy is, that in both, the nervous system is primarily acted upon, and this may result alike from an external or internal impression. Fear, or mental excitement, might produce in one instance, diarrhoea, in another, fever. Indigestible food placed in contact with the alimentary canal, and acting on the peripheral extremities of the nerves, might, by excitement of the nervous and vascular system, set up in one instance fever, in another, cholera; and again, a morbid impression or poison from without might originate in one case typhoid fever, and in another, malignant cholera. Cholera, like fever, exists in several forms, each requiring treatment according to the severity of the case.

Mr. Shirland did not approve of opium in any stage, and said he would give calomel and opium in the commencement, and that he relied on croton oil more than anything else in the collapsed stage.

Mr. Thompson said he had found the treatment by calomel in two or three-grain doses, with a quarter of a grain of opium every hour, with cold water given, *ad libitum*, as a diluent, the most successful. He believed that opium was injurious in large doses. He did not consider the disease to be contagious under any circumstances.

Mr. May said he believed it to be infectious under certain circumstances, and mentioned that he saw three cases when the epidemic prevailed in Reading, in 1832, which occurred successively in the same house, and proved fatal.

These observations on cholera afford but an imperfect sketch of the opinions of our Society, many of the papers on the subject having been published elsewhere. Amid much discrepancy of opinion among us, as in the profession generally on this obscure and intricate subject, still there are certain points of agreement, both as to the nature of cholera, and the objects to be attained in the treatment. We must acknowledge, however, that no specific has as yet been discovered, and at present we must rest satisfied to treat it like other grave disorders, according to the stage of the disease, the strength of the patient, and the urgency of the symptoms.

Dilatation of the Colon and Rectum.—Mr. Harrinson presented a specimen of enormous dilatation and extension of the colon, which he had taken from a boy, aged 3 years. He had been healthy until a twelvemonth old, when he was siezed with an attack of measles, during which his bowels were constipated for seven days, and resisted all means to open them freely. From that time the abdomen began to enlarge, and gradually increased in size till his death. The bowels were seldom moved without medicine, of which he had taken a great quantity, when large quantities of dark offensive matter passed. The size and distension of the abdomen appeared enormous in proportion to the rest of the body, which was very much emaciated.

Autopsy.—The whole of both lungs was infiltrated with tubercles. On opening the abdomen, the enor-

mously-dilated colon completely hid from view the rest of the viscera. The enlargement was confined to the colon and rectum, and gradually increased in size from the cæcum to the anus. The transverse colon was 10 inches in circumference, while the descending was 18 inches; the latter portion was also elongated, being curved to the right side, and running parallel to, and in close proximity with, the ascending portion. It was filled with feces of a pultaceous consistence. The mucous and muscular coats were much hypertrophied; liver and spleen filled with tubercles; the left kidney healthy; the right much enlarged, cystiform, and in a state of advanced tubercular degeneration; mesenteric glands enlarged.

Abscess of Liver.—Dr. Cowan related the case of a gentleman, between 50 and 60 years of age, who called on him in a state of extreme prostration, emaciated and anæmic. He complained of slight pain in the right side, which, together with his appearance, gave the idea of malignant disease; but this could not be diagnosed. A blister was applied to the side, and he was ordered a course of alteratives and tonics, and a more generous diet, under which treatment he became much better. At the end of two months, having taken cold, he again called on Dr. Cowan, complaining of the pain in the side. On examining him, he found a large nodulated tumour in the right hypochondriac region, which continued to enlarge till it extended below the umbilicus, occupying about two-thirds of the abdomen. He was much emaciated, with great prostration of strength, and suffered from profuse colliquative sweats. After the lapse of two months, he was seized with violent rigors, which lasted 24 hours, and returned after a week, when suddenly an abscess burst and discharged a large quantity of matter mixed with bile, and latterly, blood. The symptoms gradually improved afterwards, and he is now convalescent. The great interest of the case consists in its terminating in suppuration, and the recovery of the patient, when the physical signs and general appearances gave the most positive indications of malignant disease.

Intussusception of Intestines.—Mr. J. Workman presented a portion of the intestines of a child, and gave the following history of the case:—

William Atkins, aged five months, was seized with severe pain in the abdomen on April 26th. He was not seen till the 29th, when he was found convulsed; the surface of the body covered with a cold clammy sweat; the pulse very weak and scarcely perceptible; the knees flexed on the abdomen; and passing mucous and bloody stools. The treatment consisted of the administration of alteratives, with mild aperients, warm-baths, and latterly, carminatives and sedatives. He gradually became worse, and died on the 8th of May.

Post-mortem 24 hours after death.—General appearance of intestines healthy. In the right hypogastric region a tumour was observed, which on examination was found to be formed by the invagination of the cæcum, appendix vermiformis, and five inches of the

ilium, in the ascending colon. The only history he could obtain, was that the child had been grasped violently by the abdomen while playing with an elder brother. The child lived ten days after the receipt of the injury, whereas, they usually die before the sixth day.

Schirrus Pylori.—Mr. Harrinson related two interesting cases of schirrus pylori. Both were male subjects, aged 55 years. The first was a spare and temperate man, whose health had been declining for two years, and who presented the true aspect of malignant disease. On examination a tumour could be felt to the right of, and below, the umbilicus. It was hard, irregular, and about the size of a flattened orange; bowels obstinate, and constant vomiting. The symptoms increased in severity, and hæmorrhage came on, which carried him off. Treatment—palliative. The second was a robust healthy-looking man, had lived very freely when young, but had been more temperate latterly. His appetite was habitually good, and his bowels usually confined. He did not present any of the symptoms of malignant disease. On examination, the liver was found enlarged; abdomen full and tense. He did not complain of any pain; but there was great irritability of the stomach, rejecting food almost as soon as taken. The treatment was on general principles, to relieve the irritable state of the stomach, but remedies proved unavailing. Vomiting of a black matter continued, his powers rapidly failed, and he died in eleven days from his taking to his room.

Post-mortem.—Head and chest not examined. Abdomen: the parietes covered with a thick layer of yellow fat; liver, particularly the left lobe, studded with small masses of carcinomatous deposit; stomach much enlarged; pyloric extremity surrounded by carcinomatous deposit, in which there was a large deep ulceration; transverse colon adherent to the inferior surface of the liver; kidneys healthy; not much fecal matter in the intestines.

In his remarks Mr. Harrinson alluded to the insidious approach of the disease, the absence of any very urgent symptoms, and particularly of pain, which was remarkable, considering the large ulcerated surface which existed at the pyloric extremity; and lastly, the non-appearance of any symptoms of a malignant cachexia.

(To be continued.)

Foreign Department.

BARTHEZ AND RILLIET ON THE CEREBRAL DISEASES OF INFANCY.

The cerebral diseases comprised in the "*Traité Clinique et Pratique des Maladies des Enfants*," by MM. Barthez and Rilliet, are—

1. Simple meningitis.
2. Diseases of the venous sinuses of the dura mater.
3. Cerebral congestion.
4. Cerebral softening: *Encéphalite*.

5. Hypertrophy and induration of the brain. (These are classed under the head of Inflammation.)
6. Hydrocephalus. (Under Dropsies.)
7. Cerebral hæmorrhage.
8. Convulsions.
9. Contraction of the limbs.
10. Tuberculization of the nervous centres.

M. Rilliet's views on the subject of *meningitis*, or *simple acute inflammation of the membranes of the brain in infants*, have been already published in the volume for 1847, of this Journal, and we now purpose to furnish the Members of the Association from time to time, with a brief translation of portions of the above-named excellent treatise, in continuation of the subject of cerebral diseases. We therefore proceed to the consideration of the diseases included under the second head, viz. :—

Diseases of the Venous Sinuses of the Dura Mater.

Phlebitis of the sinuses is spoken of as a rare disease, or one which is rarely discovered, offering no consideration of practical importance, but interesting in an anatomical point of view. The *morbid anatomy* of these diseases embraces,—1. The changes which take place in the blood. 2. Those which occur in the vessels. 3. The secondary lesions of the brain and its membranes.

1. In their natural state, the sinuses of the dura mater are found to contain after death, a certain quantity of fluid blood, or a few small clots, which occupy a portion only of the venous channels. Sometimes they are found empty; but, when diseased, one or more of the sinuses, especially the superior longitudinal, are distended with dark soft masses of coagulated blood, which, however, are sometimes firmer, reddish, elastic, dense, thick, being easily detached from the lining membrane, which retains its polish. The corresponding part of the dura mater is tense, and forms a projection externally, when the concretion occupies the superior longitudinal sinus. The concretions sometimes extend to the cerebral veins, giving them the appearance of having been injected at the surface of the brain; but the deep veins very rarely present the same appearance. Sometimes the blood found in the sinuses is mixed with pus. M. Tonnelle has noticed the presence of false membranes of a yellowish colour, and of the consistence of coagulated white of egg, moulded to the shape of the vessel which contained them, but they were probably layers of the fibrin of the blood deprived of colouring matter.

2. The lining membrane of the sinuses is generally perfectly healthy, or else, slightly reddened by the blood; but the external cellular coat is occasionally decidedly thickened.

3. The secondary lesions are *hæmorrhage* and *dropsy*. The former occurs either under the pericranium in the cavity of the arachnoid, or in the substance of the brain. The latter occupies either the cavity of the arachnoid, the sub-serous cellular tissue, or the ventricles. The other alterations which have been

noticed, such as traces of inflammation of the brain or its membranes, may be regarded merely as coincidences. It is worthy of remark, that in none of the cases which have come under our observation have we found tubercular disease within the head, although most of the patients were in a high degree scrofulous.

Symptoms.—We are of opinion that in the present state of our knowledge, it is impossible to form a correct diagnosis of this affection; for, in the cases we have witnessed, there has been an entire absence of cerebral symptoms.

Causes.—Everything which impedes the return of the venous blood to the heart, favours stagnation in the sinuses, and we may mention in particular, tumours situated in the vicinity of the great vessels which convey the blood from the head to the heart. Purulent absorption may occasion phlebitis of the sinuses. Inflammation may also be propagated by continuity of tissue, as from caries of the petrous portion of the temporal bone. Another order of causes, more general than all the rest, is the state of debility and cachexia into which patients have fallen when inflammation of the sinuses supervenes. In all the cases we have analysed, the children were enfeebled by chronic disease; a great number were tuberculous, others rickety, and others weakened by prolonged convalescence from acute disease. With respect to age and sex, there were seven girls and ten boys. Six were 2 years old; three, 4 years; one, 5 years; one, 6 years; one, 7 years; two, 9 years; one, 10; one, 11; and one, 14 years old.

Prognosis and Treatment.—Phlebitis of the sinuses is evidently a serious disease, either in itself, or on account of the secondary lesions it determines, and the unfavourable state of body in which it occurs. With respect to treatment, since we are unable to recognise its presence during life, we have no power to apply a remedy. All that can be said is, that, seeing how much real influence debility of constitution exerts over the disease, we cannot be too careful to avoid those debilitating measures which bring patients into a state of anæmia from which they cannot rally, and which exposes them to a host of serious diseases.

Cerebral Congestion.

It is very difficult to determine the nature of cerebral congestion in infants, and to decide whether it be produced during life, or after death, or whether it be the consequence, or the cause, of pathological changes. We have found the same appearances of congestion after death, in persons in whom no cerebral symptoms had presented themselves, as in others who had died after evidence of more or less severe nervous disease. In all these cases, the cerebral veins and sinuses contained a large quantity of blood, pia mater everywhere minutely injected, except in the ventricles; sub-arachnoid infiltration in various degrees, the grey matter of a rosy tint, sometimes almost red, and this colour was commonly uniform and general. In some cases of congestion from impeded circulation, the grey substance was of a violet colour; but the cause of the congestion had seldom any influence upon the colour. The white

matter presented numerous red points, and pressure caused drops of blood to issue from the cut surface. Most frequently, both the pia mater and the substance of the brain were injected, but occasionally the injection was limited to the pia mater, and still more rarely to the cineritious substance alone.

Does cerebral congestion, such as now described, constitute a special disease, exhibiting particular symptoms, and having a regular course and termination? Do we recognise in the child the same forms of congestion as in the adult? Our experience replies in the negative. We have often discovered congestion in individuals who had died of other diseases, without having at any period suffered from cerebral symptoms.

In a practical point of view, the important thing is to ascertain whether it be possible to recognise cerebral congestion in an infant by special and characteristic symptoms, and, consequently, to prescribe a definite method of treatment. For our own parts, we admit we are unable either to describe the symptoms, or to specify the treatment.

Softening of the Brain: Encéphalite.

Softening of the brain, although common in old age, is rare in the adult, and still less frequent in early life. The following are the circumstances under which alone we have met with the disease:—

1. In children who had died of diseases of a very different nature, the ventricles containing more or less serum, the fornix, septum lucidum, and occasionally the walls of the ventricles, were softened to a greater or less extent; but this lesion, which during life was not revealed by any symptom, appeared to be nothing more than simple oedema.

2. When softening was the consequence of chronic diseases of the brain, it was situated around or in the neighbourhood of them. Thus the substance of the brain became softened under an inflamed pia-mater, around granulations, tubercles, &c., in which cases the softening was evidently secondary; and amongst all the cases which have fallen under our observation, there were but two which seemed to be undoubted examples of idiopathic softening.

(To be continued.)

FRANCE.

On the Muscles of the Membranous portion of the Urethra.

Since Wilson first called attention to the existence of two muscles surrounding the membranous portion of the urethra, many anatomists have investigated their relations, some agreeing with Wilson, others denying their existence altogether, as separate muscles, but asserting that they are fasciculi derived from the levatores ani. M. Demarquay has made many careful dissections, which he thinks will settle the question definitively. The results to which he has arrived correspond to a certain degree with the observations of Guthrie. This anatomist has given three drawings,

two of which represent the muscles which are the subject of the present inquiry, but in the third plate he has represented the muscles of Wilson together with those in the same cut. This has been the cause of the error into which many anatomists have fallen.

The muscles described by Guthrie, to which M. Demarquay calls attention, are distinct from those demonstrated by Wilson, having neither the same direction nor insertion. In upwards of twenty dissections the author has failed to discover the muscles of Wilson, but has always met with those mentioned by Guthrie. These are seen beneath the symphysis pubis, to the right and left, and are inserted into the junction of the ascending portion of the ischium with the descending ramus of the pubis. These muscles are as large as the straight muscles of the eye, running from without inwards. Having reached the membranous portion of the urethra, these fibres separate, and thus enclose the canal between them. These fibres are perfectly distinct from the anterior fasciculi of the levatores ani, being separated by the lateral prostatic cellular tissue. These muscles are distinct from those of Wilson which are stated to arise from the under part of the symphysis, and take a downward direction, while those just described take a precisely contrary route.

M. Demarquay is undecided as to the function of these muscles, doubting whether they are the ejaculators of the urine and semen, or whether they act as sphincters of the bladder.—*Archives Gen.*, September.

AMERICA.

Case of Post-pharyngeal Abscess.

By DR. CLARK, New Jersey.

The following case is interesting, both from its rarity and difficulty of diagnosis:—

A clergyman, aged 49, of plethoric habit, was seized on Sunday evening, December 24th, 1848, with violent inflammation of the throat. He had preached during the day with difficulty, but had no previous intimation of the attack, except the impression that for some months he had articulated with less ease, and had occasionally a sensation as of choking.

On the afternoon of December 28th, the author was summoned hastily to his house. He had just reached home, after exposure to a severe snow-storm. Found the patient pillowed in a rocking-chair thrown far back, his head thrown back upon his shoulders, breathing with extreme difficulty. He had not swallowed anything for about forty hours. The obstruction appeared to be situated low in the pharynx, and the aperture, blocked with mucus, through which the air forced its way, was scarcely larger than the handle of a cataract needle. The voice was entirely lost; the patient could not whisper so as to be understood with much difficulty; pulse 130, full and forcible; skin somewhat hot; countenance sallow; expression wearing and anxious. He was ordered six leeches to the larynx, and the author watched the effect, prepared

to introduce a hollow bougie if necessary for the relief of the threatened suffocation. Considerable relief was procured, but as it did not progress, the pharynx was touched next day with a solution of Argent. Nitrat., dr. ss. to oz. j. He rapidly improved until January 30th, when his attendant was hastily summoned on account of a return of the extreme difficulty of swallowing. No cause for this could be seen. The pharynx was pale, and the glands of the throat presented a natural abnormal appearance; still the pulse was frequent and irritable, its frequency having considerably increased within twenty-four hours, and there was evidence of perpetual pressure upon the pharynx. Dr. Pennington called in in consultation. We ordered the application of two leeches near the point of pressure below the pharynx, where there had been some sense of tension from the earliest period of the attack.

For the next few days there was little change, but on the 6th of February attention was called to a small tumour near the sterno-mastoid muscle. This was now suspected to be an abscess; and on the 15th, after an unsuccessful previous puncture, a large quantity of pus was evacuated. His powers from this time declined, and he died on the 24th.

Post-mortem.—A large sinus was found beneath the platysma and deep cervical fascia of the neck: it presented a smooth glistening surface, following up the course of the muscle; the sinus was found to communicate with an enormous cavity, bounded posteriorly by the almost denuded bodies of the cervical vertebrae. The pus had nearly made its way into the cavity of the chest on the left side, exposing the patient to instant death by suffocation.

The lungs were found considerably tuberculous, and in many points small abscesses had formed. There was but little effusion into the cavity of the pleurae. The heart was healthy. Believing that we had reached the cause of death in the condition of the neck and chest, we extended our examination no further.

The *post-mortem* examination explains the cause of the partial sweats, the difficulty of swallowing, the inability to sustain the head, and many other symptoms which before no explanation could solve.

General Retrospect.

PRACTICAL MEDICINE.

Softening of the Brain.

BY DR. WINSLOW.

This subject is considered by the author, under the following divisions:—

1. Its pathological character.
2. Its seat.
3. Its causes.
4. The period of life at which it occurs.
5. Symptoms.
6. Treatment.

Ramollissement of the brain is defined by Lallemand

to be a liquefaction of a portion of the cerebral substance, the remainder being natural. The softening may vary in degree from its natural consistence, to that of cream. It may be washed away by letting a stream of water fall upon it. It is a *vexata quæstio* whether this softening is a disease *sui generis*, or the result of inflammation. The author does not think it necessary to detail the arguments adduced on both sides, but contents himself with stating the results to which modern pathologists have arrived. Quoting Abercrombie, he states that softening may occur under two essentially diverse conditions. Rostan's cases, considered by him to be an affection *sui generis*, occurred in aged persons, and the softening was generally associated with paralysis and apoplexy. In many cases the softening surrounded old apoplectic cysts. The inflammatory softening, spoken of by Abercrombie, was seated in the more central parts of the brain, the fornix, septum lucidum, and corpus callosum being implicated. These cases occurred in early life. This author in his attempt to reconcile Rostan's views with his own, observes, that the softening of the cerebral matter is analogous to gangrene in other parts, and may, therefore, be either the result of inflammation, or of a *starvation* of the brain, caused by a diminished supply of arterial blood. The softening described by Abercrombie, is said to be of the first kind; that of Rostan, of the second. Dr. Hughes Bennett, by the aid of the microscope, is enabled to distinguish between the inflammatory and non-inflammatory softening. The former is said to be characterised by exudation-corpuscles, which are never found in the latter.

Softening is not confined to one portion of the brain, but most frequently affects the thalami and corpora striata. This is shown in a table of 117 cases collected by Andral.

The *causes* of this condition of brain are various. In the inflammatory form affecting young persons the disease is generally the result of those causes which develop inflammatory action, and often follows mechanical injury, or is an extension of disease from the internal ear. The more frequent causes of the affection (without reference to age) are physical injury to the head, exposure to heat or cold, defective nourishment, syphilis, abuse of mercury, excessive venery, or self-abuse, intoxication, retrocession of cutaneous eruptions, &c. The moral causes are anxiety of mind, and overstrained mental functions. The diseases with which ramollissement of the brain is frequently associated, are valvular disease of the heart, aneurism, gout, &c.

In considering the *symptoms*, the author first notices those which are precursory, confining his attention to the disease as it appears in the middle and advanced periods of life. Attacks of acute ramollissement are generally preceded by symptoms indicative of the consecutive progress of inflammatory affections of the brain. The author believes that the softening may be the effect of congestion alone, and he therefore thinks it of the highest importance to detect the earliest approach of this.

In the majority of cases the first symptom is head-

ache,—either alone, or conjoined with vertigo, increased heat of the scalp, irregular action of the superior palpebral muscles, double vision. Following these symptoms we have a sense of numbness, accompanied with irregular action of some of the voluntary muscles. The patient will complain of loss of general muscular power; and is fatigued more readily than common. This is followed, sooner or later, by more decided weakness in a limb, the ankle-joint giving way in walking, as if from relaxation of the ligaments. As the disease advances the speech becomes affected. In reference to this symptom the author notices, that before the voice becomes husky or tremulous, there is a *loss of voluntary power over the ideas*, and an inability to pronounce certain letters of the alphabet, particularly the letter R.

The mental symptoms are shown in a loss of memory, of the power of attention, and change of temper. Whenever the brain has been overworked, a deficient memory of recent events requires immediate cessation from mental exertion. The symptoms, however, which the author lays most stress upon are the loss of voluntary power over the ideas, and the disposition to substitute one word for another. This symptom is often precursory of paralysis.

The softening, more especially connected with mental derangement, the author regards as a disease, *sui generis*, and different from the form which is followed by coma, or lesions of the motor power. It is not confined to advanced years, and often exists for a long period, independently of paralysis of the extremities. In these cases the softening is generally found to be situated in the cortical portion. The lesion, when observed in early life, has, in the author's experience, invariably been consequent upon excessive mental labour, or anxiety of mind. The incipient mental symptoms are generally a weakness of mind, depression of spirits, disposition to cry, confusion of ideas, and weakened memory. The disease is illustrated by the following cases:—

A physician, who had been engaged for twenty years in active practice, had been subject for a few years prior to his attack, to an unusual degree of mental excitement and hard work. The first symptom which he manifested was his mistaking the names of two sisters whom he attended. Before the confusion of mind attracted the patient's own attention his wife had observed an alteration in his manner, which made her fearful that he was overstraining his mind.

In another physician of eminence, the first alarming indication was an unusual degree of solicitude in reference to the accuracy of his prescriptions, frequently writing and re-writing them, repeating questions to his patients, and forgetting the names of his intimate friends. Conjoined to this was great irritability of temper.

A gentleman, aged 25, after intense application in reading for hours, was noticed one day to manifest an extraordinary degree of risibility, quite uncalled for by circumstances. He subsequently became sullen and depressed, taking little notice of anything. He was

consigned to an asylum, and eventually became perfectly imbecile.

The treatment is next considered. If the mental impairment be early recognised, and prompt measures be adopted, the disease may be in the majority of cases cured. The great remedy is rest for the brain, and as a sequence for the mind. Without this nothing can be done. The medical treatment consists in a judicious adoption of those means which are calculated to restore a fibrinous or plastic state of the blood, and to promote its healthy circulation in the brain. The patient should live generously, and the digestive functions should be improved by gentle alteratives, tonics, and stimulants. Rubefacients and the shower-bath are useful auxiliaries. Small doses of phosphorus have been found useful.—*Journal of Psychological Medicine*, October.

Muscular Rheumatism.

By M. VALLIEX.

The essential character of this affection is pain, and no anatomical lesion belongs to it, unless it is complicated with other affections. It possesses various analogies with neuralgia, and the two affections may be easily transformed into each other. If the pain remain concentrated in the nerves, we find isolated, characteristic painful spots—a *neuralgia*, properly so called. If it spread to the muscles, the contractions of these are especially painful, and *muscular rheumatism* is present; while, if it extend to the skin, we have a *dermalgia*. All these forms of the same affection may unite together, or by two and two.

The *diagnosis* of acute muscular rheumatism from inflammation is generally easy, owing to the absence of the well-known signs of the latter. It becomes more difficult when the muscles over a joint are those affected; and on no account can the identity of muscular and articular rheumatism be admitted. In respect to its diagnosis from neuralgia, it may be observed that it is much more rare to mistake a rheumatism for a neuralgia, than the reverse. In rheumatism, the pain and tenderness are more diffused, and are found rather at the attachments of muscles than in the course of the nerves. Muscular action causes an amount of suffering altogether disproportionate to the other spontaneous or excited pains; while in neuralgia the reverse is generally observable.

Prognosis.—Chronic muscular rheumatism is more obstinate than chronic neuralgia; while exactly the reverse is true of the *acute* form. However severe, it is rare to see it continue longer than a week; while neuralgia may persist, with all its original severity, for weeks or months. Rheumatism is generally a far less serious affection than neuralgia; it does not produce the same perturbation of the economy, and is more easily dissipated. The same is true of the *chronic* form, for we only now and then see paralysis of one or several muscles result; while the subject of neuralgia not unfrequently continues to lead a miserable existence, deprived of the use of his limbs.

Treatment.—These two diseases have too often been

treated alike, and with great mischief to the subjects of them; for while bleeding may benefit rheumatism, it is very hurtful to neuralgia; and flying blisters and intercurrent cauterization, so useful in acute neuralgia, are of little avail in rheumatism. In *chronic* cases, hydrotherapia, shampooing, and thermal waters are more useful in rheumatism than in neuralgia; but in this stage the treatment of the two diseases approximates much more than in the acute one.

Among the different species of muscular rheumatism may be noticed that which affects the *muscles of the head*; sometimes the occipito-temporal, the masseters, or temporals, and at others the muscles of the eyes or cheeks being those which suffer. This pain is distinguished chiefly by the exacerbation which is produced by causing the sudden movement of the muscles affected; furnishing a far stronger contrast with the spontaneous pain than is the case with other pains of the head, as well as by being limited to the muscles in question. This form best yields to the external application of the *cyanide of potassium*; and of all forms of cephalalgia it is that which is least benefitted by blistering the nape, so indiscriminately resorted to. This rheumatism of the head is found also generally worst on rising in the morning, especially in *moderately* cold and damp weather. This is attributable to the parts having been exposed to the cold during the night (from which they would have been protected in *very* cold weather), and the simple precaution of covering them with a cap or handkerchief has not unfrequently relieved pains which have long obstinately persisted.

Besides a *torticollis*, rheumatism may show itself in the cervical region in the form termed by the author *cervicodynia*, in which there is a very variable amount of dull pain felt along the cervical region, and even extending to the epicranial muscles. It is much aggravated by stretching the head backwards, or keeping it bent forwards. It is easily transformed into a neuralgia, and may become confounded with this, as it may with congestion of the brain, when it extends to the pericranial muscles. The most successful means are, sea-water baths, cold affusion, cupping, and acupuncture. When the affection becomes chronic it is very obstinate.

One of the most obstinate forms of muscular rheumatism, as also one of the most important, as it may lead to *paralysis of the deltoid*, is *rheumatism of the muscles of the shoulder*. In its acute form it is distinguished with difficulty from articular rheumatism or acute arthritis. In its chronic form it sometimes induces the above-named paralysis. Several cases are related by authors, in which paralysis supervened on painful affections of the shoulder; but these are, for the most part, too imperfectly reported to enable us to judge whether this arose from chronic muscular rheumatism or inflammation. Others are more explicitly detailed, and two of these are quoted by the author, in which acupuncture, after the failure of other remedies, effected a cure.—*British and Foreign Medico-Chirurgical Review*, October.

CORONERS AND MEDICAL WITNESSES.

To the Editor of the Provincial Medical and Surgical Journal.

SIR,—Although I would avoid a “thrice-told tale,” there is cause to think that some of your readers may not have heard, otherwise than through the *Lancet*, of proceedings I have recently taken in the County Court against Mr. H. M. Wakley, for the recovery of a fee for attending and giving evidence at an inquest, and his message, sent through his officer the constable.

The deceased had died of cholera after two or three days’ previous illness with colic and diarrhœa. I was duly sworn as a medical witness, and detailed the symptoms, deposing that the death had arisen from malignant cholera. The coroner desired me to state what treatment I had adopted. On my declining to do so, upon the broad principle that answers to such inquiries from a legally-qualified medical man, were not the objects of a Coroner’s Inquest, and that a non-medical jury could not appreciate nor adjudicate respecting the treatment, the coroner adjourned the inquest that a *post-mortem* examination might be made. The result of this, as given by Mr. Shaw, confirmed my deposition, and a verdict—“Died from cholera”—was returned, *malgre* the coroner’s deputy having said, “he, for one, should not feel satisfied unless an analysis of the stomach’s contents was made.”

For years past I had held that a medical witness, accredited by the diplomas of the country, was not bound, under ordinary circumstances, to detail the “treatment,” he had thought fit to use with the hope of averting death from one he had been called upon to succour in illness. But the “fussiness,” or “*cæcus amor sui*” of a medical coroner have led to my being catechised in a most ordinary case under a threat of Newgate, as to the remedies I had used for angina pectoris and chronic bronchitis. Nor was Mr. Wakley, M.P., content on being told in round terms, that “stimulating expectorants,” had been given in the latter, and “diffusible stimuli,” during the paroxysm of the former; but he demanded to be told in what doses the tincture of squill had been given, and how much sulphuric æther I had prescribed for a dose. Further, hearing that an external application had been used, he said, “and now, what was the liniment?”

In the case of cholera I felt the questions to be equally irrelevant to the issue, and declined to answer them; I have been since assured, that though this was common sense on my part, it was not *law*. The deputy coroner, on announcing the verdict said, that as on principle I have refused to give my evidence in full, he, upon principle, should withhold the fee. This he said in the open court. I afterwards asked him if he made the non-service of the written notice the justification of this measure. He disclaimed this ground of defence to me in the presence of Mr. Berry, surgeon. Relying, therefore, upon this assurance, I was induced to allow the Medical Protection Office to act in the case on my behalf. When the trial came on in the County Court, he renounced the defence he had said he could stand by, on which alone the action was

brought, and slid out of court with a non-suit against me, on the legal informality he had himself committed.

Your readers may see the case ably treated in the last number of the *Medical Gazette*. There is also a detailed account in the *Medical Times*; either will be a sufficient antidote to the wilful, and, may I say, malignant perversion of the truth, which the *Lancet* has adopted. Obstinate as this journal has represented me to be as a "contumacious witness," and wrong in treatment, or unprincipled in some *secret* remedy as the coroner affected to suspect me of being, the whole of that treatment was publicly and cheerfully recorded by me at the General Board of Health, near forty-eight hours before the inquest was held.

It may suffice that I have thus drawn attention to the subject, and protested against the garbled statement and unworthy imputations of the *Lancet* and its Coroner Editor. Consolatory is the recollection, that the President of the Association, Dr. Hastings, declared lately at Worcester, that the great objects of the said Society were the cultivation of the social sentiments, and the degradation of all that is sordid. I may have erred in a matter of law touching a coroner's power to force a physician or surgeon to state his treatment to gratify the idle vagary or love of power in coroner or jury. I certainly did err in considering a deputy coroner would be bound by his word, attested by credible witnesses, or I should not have commenced an action which I knew was liable to a non-suit on defective legal formality.

Let all this pass. Our members in the provinces may have less cause for vigilance than those in Middlesex, who are threatened with Newgate under alleged contumacy. You, Sir, and the members of the Provincial Association, will, I am sure, let the public interest be protected in every becoming way, and cause class-interest to be subservient to the general good of society. You will lend your influence to make the coroner's powers to be clearly ascertained—if needful, revised also, and clearly defined, and then by all of us let them be rigorously obeyed.

The medical profession, in every relation of life, should be as ready to succour suffering humanity, and assist the cause of weakened justice, as to resent aggressions upon their own social feelings, lawful rights, and sense of honour, come these indignities from private individuals, from congregated bodies, or coroners. "*Plat justitia ruat cælum.*"

I have the honour to be, Mr. Editor,

Your very obedient servant,

CHARLES F. J. LORDE.

Hampstead, October 26, 1849.

FUNGOID GROWTHS IN CHOLERA.

To the Editor of the *Provincial Medical and Surgical Journal*.

SIR,—My attention has been attracted by Dr. Branson's hypothesis to account for the presence of fungoid growths in cholera evacuations. I am not about to enter upon any consideration of the general subject, which I think likely to be set at rest by the

investigations of my friends Drs. Baly, Gull, Jenner, and Mr. Marshall; I merely wish to make a remark on the existence of *torulæ* in saccharine fluids confirmatory of the quotations in Dr. Branson's letter. It has been said that the *smallest* quantity of sugar in urine is sufficient to determine the growth of *torulæ*, but I doubt if this statement is generally appreciated at its full value. *Torulæ* may occur abundantly in urine when sugar cannot be detected by Trommer's test—that which I have been in the habit of employing at the bedside. I do not say that it is absent in these instances, because it is in *oxalic urine* that I have mostly observed this fact, but it is well worthy of being kept in mind that it may be *so minute in amount*, that it may escape observation, owing merely to the fallacies to which the extemporaneous search for it in a nitrogenous fluid is exposed. This may serve as a hint to inquirers, that they must not rest satisfied as to the absence of sugar in choleraic evacuations where *torulæ* may be found, until a more delicate analysis has been made. I have found them in urine where not only was the quantity of sugar so trifling as to leave no influence upon the specific gravity of the liquid, but principally where the *density* was *actually lower* than the customary healthy standard. (See a paper by myself, on "*Oxalic Urine*," in the *Provincial Medical and Surgical Journal* for September 8th, 1847.)

I remain, Sir,

Your obedient servant,

EDWARD BALLARD, M.D.

East Retford, November 6, 1849.

P.S. I may add, now that I am upon the subject of vegetable growths, that I have five times met with *globular bodies in the urine* which I have not seen elsewhere described: twice in a case of chronic rheumatism, and three times in a case of eczema of the scalp. They varied in size from that of a mucous corpuscle, and smaller, to four times that size; the smaller ones had a smooth outline, and were distinctly *granular internally*; the larger were *dark brown*, and not only contained granular matter, but were irregularly covered by granular elevations, more or less minute, over their surface. Some I have seen *burst*. In one instance I saw two or three small ones attached in a row to one of the large bodies. In both of the above cases oxalate of lime occurred in the urine, and I have never seen them where this salt was absent. In four out of the five observations the urine presented an excess of phosphates, and in three of these there were prisms of triple phosphate visible in more or less abundance. In only one out of the five did the urine exhibit normal acidity, and in two it was alkaline to test paper.

SCIRRHUS OF THE BREAST.

To the Editor of the *Provincial Medical and Surgical Journal*.

SIR,—May I beg the favour of your inserting the following questions in the *Provincial Medical and Surgical Journal*, in the hope of eliciting a reply from some practical and experienced surgeons (members

of our Association,) on a point of vital importance and interest to society. I have endeavoured to inform myself on the subject of scirrhus of the female breast by reading the published writings of many of our distinguished countrymen, and I regret to say I have been dissatisfied with the result of my reading, and have been unable to form any definite opinion, for in many respects there is a wide difference of opinion on the nature, as well as of the treatment, of this "cruel scourge of humanity."

I have taken every opportunity of asking many surgeons of experience (some who have retired from practice) what has been the result of their operations for scirrhus of the mammary gland. The answer I have almost invariably received has been,—the less you interfere the better. During the last few years I have been made acquainted with cases in which both eminent London and provincial surgeons have been consulted, and the opinions given the anxious patient and her friends have been discordant indeed. In more than one instance, under the advice of "great men," the whole gland has been extirpated, when, to all appearances, the operation promised success; yet the result has been far different; the wound has nearly healed, but instead of cicatrizing, the edges have become dark and shining, and carcinomatous ulceration and miserable death has ensued.

The question has arisen in my mind, was not the fatal termination hastened by the operation. We know that a scirrhus tumour of the female breast, if left to itself, usually ulcerates, and the patient dies from its effects.

Every surgeon who witnesses the progress and termination of these cases would gladly avail himself of a doubtful remedy, in the hope of being instrumental in arresting this state of things. The only remedy we have is the knife, and of the propriety of operating I am desirous of being made acquainted; and I hope the members of the Provincial Association, who have leisure, will give me their opinions through the medium of the *Journal*. I will not trespass longer on your patience.

I am, Sir, your obedient servant,
CLEMENT HAWKINS.

Cheltenham, November 5, 1849.

Questions.

1. Is scirrhus of the female breast ever a local disease?
2. Is the removal of it by the knife advisable when it is in an indolent state?
3. When the operation has been performed under such circumstances, has the disease been observed to take on a more active form, and proceed more rapidly to a fatal termination?

N.B.—Any other practical information on this subject.

MEDICAL BENEVOLENT FUND.

To the Editor of the *Provincial Medical and Surgical Journal*.

MR. EDITOR,—Will you allow me to suggest to each one of your readers, that the day appointed for public

thanksgiving,—viz., next Thursday, would be a peculiarly favourable opportunity for contributing a special thank-offering to Almighty God, in the shape of a donation to the Medical Benevolent Fund, as a token of grateful acknowledgement of that mercy which has protected himself and his family from the destroying pestilence, from the effects of which several have become claimants upon our fund, and many more are suffering from the direst calamity?

A small sum from each would amount to a considerable aggregate, and might be appropriated to the relief of sufferers from cholera.

I am, Mr. Editor, faithfully yours,
WILLIAM NEWNHAM.

Secretary.

Farnham, Nov. 9, 1849.

Medical Intelligence.

THE CHOLERA SUB-COMMITTEE OF THE COLLEGE OF PHYSICIANS, ON THE CHOLERA FUNGI.

The following are the principal conclusions and results arrived at by this committee on the nature and import of certain bodies examined microscopically in relation to cholera:—

"1. Bodies presenting the characteristic forms of the so-called cholera fungi are not to be detected in the air, and, as far as our experiments have gone, not in the drinking-water of infected places.

"2. It is established that, under the term 'annular bodies' and 'cholera cells, or fungi,' there have been confounded many objects of various and totally distinct natures.

"3. A large number of these have been traced to substances taken as food or medicine.

"4. The origin of others is still doubtful, but these are clearly not fungi.

"5. All the more remarkable forms are to be detected in the intestinal evacuations of persons labouring under diseases totally different in their nature from cholera.

"Lastly. We draw from these premises the general conclusion that the bodies found and described by Messrs. Brittan and Swayne are not the cause of cholera, and have no exclusive connexion with that disease; or in other words, that the whole theory of the disease which has recently been propounded, is erroneous, as far as it is based on the existence of the bodies in question.

WILLIAM BALY, M.D. } Cholera Sub-
WILLIAM W. GULL, M.D. } Committee.

QUALIFICATION OF MEDICAL OFFICERS FOR PAROCHIAL APPOINTMENTS.

An interesting discussion took place in the St. Pancras vestry, on the appointment of a medical officer for one of the districts of that extensive parish. The directors of the poor having advertised for a medical

officer for the north district, vacant by the resignation of Mr. Smith, three candidates presented themselves to the vestry. The first stated that he was a member of the College of Surgeons of London; the next, that he was a member of the College, and a licentiate of the Apothecaries' Company; and the third, that he was a member of the College of Surgeons of Edinburgh. All were in actual practice in the district. In the discussion which took place, Mr. Harding, a medical member of the Board, made some explanatory remarks on the present state of the law, the former custom of the vestry, and the merits of the qualifications produced. The vestry determined that a qualification in medicine and surgery be required of each candidate. That as the College of Surgeons of Edinburgh and the College of Surgeons of Dublin educate and examine in medicine, surgery, midwifery, and chemistry, the diploma of either of these colleges be considered a sufficient qualification. The effect of this vote, as far as the parish of St. Pancras is concerned, was of course to exclude the member of the College of Surgeons of London, on the ground that he had not, by examination, proved his qualification to practise medicine, midwifery, and pharmacy.

FEES TO MEDICAL MEN.

The Royal Insurance Company, Liverpool, have issued a notice that they will give a fee in EVERY case of reference to a medical man.

COPAIBA CAPSULES.

Capsules are occasionally to be met with in the market, purporting to be copaiba capsules, but which do not contain one particle of the balsam. A correspondent informs us, that he examined some of these spurious articles, and found that they were filled solely with train oil. He further states, that his experience in this matter has been confirmed by that of others. The fraud in this instance is very reprehensible, and the dealers ought to be punished.

APPOINTMENT.

Dr. Edward Crisp has been unanimously elected Physician to the Metropolitan Dispensary.

NEW COUNCILLORS OF THE COLLEGE OF SURGEONS.

At a numerously attended meeting of Fellows on Thursday, November 1st, Mr. George Pilcher, and Mr. John Bishop, were elected members of the Council, in the vacancies caused by the death of Mr. C. Aston Key, and the resignation of Mr. Welbank. The result will have a material influence in forwarding the projected revision of the Charter of the College.

THE FELLOWSHIP.

We understand, that, in consequence of the new regulations from the College coming into operation in the ensuing year, making it compulsory on all junior candidates presenting themselves for the honour, to

undergo examinations in the classics and mathematics, a larger number than usual will present themselves for examination at the ensuing meetings on the 4th and 6th of December.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, November 2nd, 1849:—Messrs. Robert Hamilton, Ipswich; John Thompson Goodrich, Paington, Devon; Richard Allanson Gaskill, St. Helen's, Lancashire; Charles Anthony Floyer, Floore, Northamptonshire; William Martin Hatfield, Chilham, Kent; Henry Taylor, Bury St. Edmunds, Suffolk; John Gilby Townsend Rossiter, Bristol; Thomas Croft, Bracknell, Berkshire; John Lascelles Nowell, Liverpool; Edward M'Kellar, Madeira; Samuel Reynolds, Debach, Suffolk; Henry Dixon, Stockton-upon-Tees.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Members on Thursday, November 1st, 1849:—Joseph Hughes Hemmings, Kimbolton, Hants; John Cox Lynch, Norwood; Wm. Ferdinand Wratishaw, Rugby; Thomas Pettit Wright, Chatteris, Cambridgeshire.

OBITUARY.

June 12th, at Sidney, New South Wales, after a few days' illness, John Loftus Hartwell, Esq., Staff-Surgeon, 2nd class.

October 30th, at his residence, Woburn Place, Russell Square, Mr. Thomas Morton, aged 36.

November 5th, at his residence, Guildford, Surrey, Mr. Caleb Woodyer, in the 84th year of his age. He was elected a fellow of the Royal College of Surgeons in 1843, and at the time of his death was, we believe, the oldest member of the College, having received his diploma about the year 1790.

At Clapham, aged 65, Edwin Tipple, Esq., Surgeon, late of Mitcham, Surrey.

BOOKS RECEIVED FOR REVIEW.

The Physiognomy of Disease. By George Corfe, M.D. London: James Nisbet, Berners Street. 1849. 4to, pp. 151. Plates.

Homœopathy, a Delusion!!! A Lecture on Homœopathy, by Dr. Guinness, analytically examined at the Athenæum, before the Members of the Exeter Literary and Scientific Institution, on the 23rd of October, 1849, by T. W. Christie, Member of the Royal College of Surgeons, England. Dublin: Fannin and Co. London: Longman and Co. Liverpool: Walmesley. Exeter: Glanville. 1849. 8vo, pp. 46.

TO CORRESPONDENTS.

Communications have been received from Mr. B. Travers, jun., Dr. Cooper, Dr. Boisragon, Mr. Hugh Neill, and Mr. Teale.

It is requested that all letters and communications be sent to J. H. Walsh, Esq., Foregate Street, Worcester. Parcels and books for review may be addressed to the care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

OBSERVATIONS UPON

INJURIES OF THE HEAD.*

By BENJAMIN TRAVERS, JUN., Esq.,

Fellow of the Royal College of Surgeons; lately Resident Assistant Surgeon
and Lecturer on Surgery at St. Thomas's Hospital, &c. &c.

PART II.

OF SYMPTOMS AND PRINCIPLES TO BE OBSERVED IN TREATING HEAD INJURY.

It is an old observation, that the heart's action is, to a certain extent, independent of the brain, and we know that this is borne out by experiment. If a living animal be pithed by dividing the spinal cord next its junction with the tuber annulare, the contraction and dilatation of the heart will for a time continue as before. It evinces a like capability of action when removed from the animal's body, and the phenomenon may be sustained both as to period and velocity, by raising the surrounding temperature, as by immersion in warm water. Still the whole affair is transitory, and the fact is not of much importance if stated as a ground upon which to base any practical suggestion; for the source of the nervous influence being cut off, so soon as the vital endowment of the part is exhausted, death ensues. We cannot maintain the supply of vital force so derived beyond a very brief space, or renew it when once expended; and therefore, whether we experiment upon animals, or reckon upon the resources of the system under injury, we must not count upon any encouragement which such an isolated phenomenon holds out. From the moment when the brain finally ceases, in consequence of interrupted connection to exert its influence over the rest of the body, the animal so circumstanced begins to die. I have never heard of any experiment or observation which invalidates the fact. The condition of the brain may be that of disease, and under such circumstances the system exhibits signs of its altered function, so long as its connection with the spinal marrow is preserved; but when the circulation in these organs is suspended, or their continuity is permanently interrupted, the process of dissolution commences, and is completed, sooner or later, according to the character and extent of the lesion.

Cases every now and then occur which furnish the apology for making a somewhat trite remark like the

foregoing. For example: people under treatment for local injury sometimes die suddenly, when all has been going on favourably for many days, and that crisis has been reached at which a new and urgent call is made upon the powers of life.* In other cases where a chronic disease of an important organ has gradually impaired the proper nutrition of the system, the energies of life have been seen suddenly to succumb, and the spark has been extinguished almost in a moment of time. Without any premonitory sign, the patient on a sudden complains of præcordial oppression; a sense of faintness supervenes, then restlessness; he gasps and tells you he is going to die; and in fact he does die, perhaps, upon the spot.

So long as the brain retains its integrity, a loss of consciousness and muscular power is not of fatal import; the person so circumstanced is not dead, but sleeps; but when that organ has undergone changes incompatible with the preservation of its office, we are informed of the fact through the medium of the circulation. Hence, in head injury, experience always regards, with a just apprehension, a flagging or uncertain pulse, or one which continues steadily doubled in its rate of frequency, independent of any other symptoms, strictly cerebral, which may happen to prevail at the time.

I will now briefly address myself to some particulars affecting the local and general management of head injury. If we compare the remarks of such clever observers as Dean and Pott with the practice of the present time, we shall be puzzled to explain what has become of a numerous class of cases, which in their day called for the continual "setting on of the trephine." They must still occur, and be even more frequent now than formerly; the fact is, that they are differently interpreted. Mr. Pott, with all deference be it said, for he was a scholar as well as a surgeon, mistook the road upon a false theory of "prevention." Mr. Dean fairly admits "that the people all died in spite of the trepan, physis, bleeding, and low diet, and that those who escaped the operation, or any treatment at all, often made the best recovery."

To be candid we must admit, that the principles of inflammation, the doctrines of constitutional power, and functional derangement, were very improperly under-

* For a very remarkable case of this kind vide the report of an inquest upon the body of Andrew Nelson Ruddock, Esq., surgeon, of Bristol, in the local journals, who died one month after simple fracture of the leg, on Friday, November 4th, 1842.

* Concluded from page 531.

stood, and not appreciated then as now, and that besides more exactness of observation and detail, we possess in the action of mercury a means of arresting inflammation, and restoring a disturbed balance of circulation, of which they knew nothing. To the surgical pathologists of our own day, and in an especial manner to those employed in watching the course of inflammatory changes in the transparent tissues of the eye, we are indebted for what may well be termed a discovery, first brought from the London Eye Infirmary, Charter-house Square, to the great hospitals, and since employed to prevent, modify, or remove adhesive deposit, as the case may be, and controul the various terminations of inflammation. Where, half a century ago, the lancet was indiscriminately used, or the knife, the saw, and the cold grinding cathartic constituted the treatment of a doubtful concussion, we now attach more confidence to the operation of small doses of calomel, at regular intervals, aided, as required, by the trickling bleeding procured from a score of leech bites.

Head injury is often remarkable for the great obscurity of its early symptoms, to say nothing of their variety. After the same kind and amount of violence one man is rendered stupid, and his pupils, whether dilated or not, are inactive; he is drowsy, sick, and moans when spoken to; his pulse is feeble and slow, and his surface chilled. Another is reduced to a condition of positive insensibility, casts his stomach at the time of the accident, but not afterwards; is very cold, has a large motionless pupil, a slow labouring pulse, not unfrequently snores loudly; one arm or side of the face may be paralyzed, along with the bladder and lower extremity; the urine may or may not be permanently retained. The continuance of such a condition is one among the symptoms of a recoverable state, or its opposite. Perhaps there is an appearance of blood about the nares, or it has trickled in small quantity from the meatus auditorius. A third, after a severe blow or fall upon the vertex, is excessively violent and incoherent, requiring restraint to keep him in bed; the pulse bounds; the surface is not cold; there is a fixed pupil, but an expression of wildness about the eyes. Now, although any one of these conditions may exist, irrespective of any lesion whatsoever, being any possible form of shock or recoverable commotion, it may be the forerunner of acute membranous inflammation, or of that hopeless train of symptoms which indicate lesion of the substance of the brain. There are many cases modified in their course and character by habits of intemperance or by a previous physical exhaustion, depraved secretions, or unfavourable mental conditions, which are from such causes additionally obscure under the effects of injury, so that it is as necessary to inform oneself of the previous habits and position of the patient, when summoned to such accidents, as it is where the disease is idiopathic or the symptoms of a more slow and insidious nature.

I always direct the head to be shaved; even where the mischief is slight it is a useful precaution. One sometimes discovers a wound or bruise by so doing which might otherwise have escaped detection for days, and it is a positive relief to the entire region, as well as neces-

sary to the efficient use of topical means. A spirit lotion, or a diluted Goulard wash, with the Liq. Ammon. Acetat., are amongst the best refrigerants commonly in use; but cold vinegar and water answers as well as any other application.

With regard to bleeding, abstraction of blood from the arm is of course at times indispensable, but often the slow oozing obtained by good leeches is not only more effective, but by far the safer practice. This more gradual operation of the depleting agent tells with great effect upon cases where the reaction is disposed to be tardy or incomplete. I have seen patients slowly open their eyes and recover consciousness, after trickling leech-bleedings, who had been previously bled copiously from the arm without any evident good effect; and I believe that if the heart is too rapidly impressed by venesection *pleno rivo*, along with faintness, there supervenes increased congestion and fresh loading of the sinuses. The respiration under such circumstances becomes more and more impeded, or a fresh fit of violence comes on—excitement without power. Put by your lancet in such a case, I should say, for you will probably kill your patient if you persevere. Watch especially the venous circulation; where the pulse will bear the pressure of the finger, order an application of six leeches to one or both temples, (I have laid them on one by one,) bathe the wounds so made with hot water and now look narrowly to the breathing, the countenance, and the pulse. The soft murmur of child-like repose slowly takes the place of the former retarded or irregular respiration; the face is no longer suffused, nor the features working and distressed; the lips are slightly compressed, which lately hung in a semi-paralyzed state, flapping, and loose; the pulse is now regular, 80° or 90° in the minute; the patient is reviving, and will reawaken to consciousness by-and-by, when the capillaries are sufficiently relieved, through the influence of a regular pulmonic circulation; the blood is now more decarbonized, and when the heart in its turn begins to respond to its accustomed stimulus, the reaction may be deemed complete, and the patient is restored by gradually unloading, instead of suddenly emptying, the oppressed vascular tissues. As for counter-irritants they are useful in most recoverable commotions of the brain, and their diffused action is at times very salutary. Where there exists an early tendency to excitement, they will sometimes control it in a remarkable manner—when active depletion fails, or is plainly inadmissible. They are especially operative in those morbid conditions where there seems to be a want of power to rouse and sustain the action of the capillaries. In recent head-injury it is best not to irritate by maintaining a raw surface, or keeping the blister open, as it is called. The relief to be obtained by counter-irritants in such a case is not to be confounded with the proceeding indicated in chronic disease. The soreness and irritation of an issue are very undesirable here, and the exhaustion so produced may be of serious consequence to a person otherwise disposed to early convalescence. The regions best adapted for these applications are the crown of the head and the nape of

the neck. The required irritation may be kept up for a period of six or twelve hours, according to circumstances. Blisters should never be used where there is reason to believe that the brain is lacerated, or irretrievably injured, and on such occasions no other objection need be advanced than this, viz., that they are utterly useless.

OF PURGATIVES AND THE USE OF MERCURY.

There is nothing more repugnant to a thinking mind than the very coarse and unreasonable practice of giving large and repeated doses of purgative medicine immediately after the occurrence of any severe accident, nor in head-injury is such a proceeding always free from danger to the life of the patient. However plain the indication for laxatives may be, the practitioner should bear in mind, that whether it be a broken leg or a broken head, he has ordinarily to do with complicated effects. If the previous diet has been poor, and the meals irregular both in quality and quantity, there will probably be unhealthy or defective secretions and loaded bowels, but for the same reason there will also have existed so much the less ability to resist the impression of severe shock or sudden violence. Such a consideration is strengthened by the fact, that in many cases the system is already debilitated by habits of intemperance, or slow organic changes may have commenced in the lining membrane of the stomach, or in the substance of the liver or kidneys, implying a necessity for extreme caution in the use of medicine of any kind. I am very sure that I have more than once seen convalescence retarded by a repetition of large doses of calomel, or the frequent use of Epsom salts, where the system could not bear such treatment. The rich and dainty, too, under similar circumstances, often require to be handled with equal caution, for that luxury and excess are more fatal in their enervating influence than a meagre and scanty diet, is proverbial. It is a common observation that we give ordinarily too much medicine, and I do believe that in surgical cases much of the physic might well be spared, or at least its intention be more certainly carried out by means of restricted and careful diet; nevertheless purgatives are by no means to be overlooked in the treatment of head-injury. Whenever stupor, nausea, with vertigo or bowel-pain, are complained of, a very early recourse must be had to laxatives at least. Castor oil or the compound senna draught should be given as soon as the patient is in circumstances to swallow and retain the medicine, but I have never been able to appreciate the necessity for an immediate exhibition of large doses of calomel in simple concussion. Slow bowels or obstinate constipation not unfrequently follow injuries of the head, and the biliary secretion is especially liable to defect or suppression, but such a state is not the production of a few hours, and some days elapse ordinarily before calomel need to be resorted to. When its use is indicated, it is better to give it in a full dose; but it is an old remark, that all mercurials have a tendency to lower the patient when too liberally administered, and this is not desirable when we wish to institute a process of repair, or

restore the powers of the system with certainty and expedition.

One reason why the older surgeons saw so many cases terminate in secondary and fatal inflammation of the membranes of the brain was, their inability to discern the stage and period of reaction, or, in other words, to determine the moment at which one or two decisive doses of calomel would often have prevented the necessity of more, and would have summarily stopped, if it did not anticipate those changes, which terminate in incurable effusion. In all the simple or less complicated cases, such an irritating medicine should be administered as will suffice to empty the loaded colon, and gently stimulate the alimentary canal. Healthy appetite, next to rest, is the surest and most unfailing sign of a return to health; it should be cherished and assisted, not destroyed, by the operation of medicine. Injections per anum are not often required in the early treatment of head injury; but if the stomach is irritable, or there is reason to suspect a loaded state of bowels, they may be administered with advantage. Some common salt stirred into a pint of thin gruel, or a warm senna infusion, holding some sulphate of magnesia in solution, or an ounce of turpentine mixed with a quart of warm water and the yolk of eggs, are among the best forms, and are generally productive of immediate relief to the distended abdomen.

I have endeavoured to draw a line of demarcation between those instances of disorder in which mercury is not essential to the recovery of the faculties, and others wherein one or two full and decisive doses pending the return of convalescence, are of marked utility, if not an urgent necessity. I have further ventured upon the suggestion, that calomel so exhibited should be given in a full dose, and not hindered in its proper effects by extraneous combination. This observation applies to the purely evanescent operation of this remedy. I shall now briefly allude to its value as a specific in cases of a more complicated or obscure character. It often happens after the lapse of a few days from the time of the mischief, that the patient remains in a very stupid condition, that he is with difficulty roused from his lethargy, and when taxed with enquiries, the expression or complaint is one of pain and uneasiness referred to the head generally. There is a great intolerance of light; the skin is dry and hot; if the patient can be induced to protrude the tongue, it is not simply loaded, but coated with a white sticky secretion. The bowels, perhaps, have been copiously relieved by purgatives or injections. There is ordinarily no evidence of any loss of command in the sphincters; but the patient will part with the contents of the rectum often undesignedly, like a newly-born child. Sometimes the lethargy is uninterrupted, as in the case of slow and retarded reaction; sometimes there is a state of moaning and extreme restlessness. If the patient does not refuse food, it is at least a matter of indifference to him. The pulse is, I believe, always accelerated in the case I am describing, and generally contracted—that is, quick and sharp. If there be confusion or wound, it must be narrowly looked to,

and the manual interference of the surgeon is sometimes called for before any medicine can be of service; but the symptoms, as regards the brain and its investments, are those of irritation and approaching inflammation. They are in contrast with the paralytic stupor of compression on the one hand, or the irregular and automatic movements of laceration on the other. To say where the congestion of irritation ends and inflammation commences is especially difficult in the case of the brain. The two states are allied, so much so, that we might almost regard them as stages of the same disorder. Be this as it may, these are the cases, as a class, in which mercury will effect the greatest good, and it is the only remedy which will dissolve the mystery of doubtful emergencies. If a patient under the prolonged effect of a severe blow or fall followed by insensibility, without breach of the integument or cranium, as far as can be known, does not mend permanently and decidedly under the action of mercury pushed to a gentle pyalism, all other means having failed, the case is ordinarily fatal, and the patient dies. Sometimes a rapid act of inflammation has passed the limit of relief before this only effectual remedy is employed, and its termination is evidenced by characteristic appearances after death, or the brain may have suffered from one of those lesions, whether central or superficial, which proves destruction, not by reason of its extent, but because the business of repair cannot be accomplished. Irreparable injury, however minute, operates directly to exhaust the innervation which controls the circulation and function of organs subservient to life. The restorative action of mercury does not involve, as a necessity, so much rapidity of action as would entail great or sudden exhaustion, and it is to be accompanied by such local measures as tend to subdue inflammation. At first it is not desirable to exhibit opium; but if there be an irritable mucous surface, or the subject is aged, or if there be signs of organic change in other parts, it is then right to use it in combination with calomel, and with or without an antimonial, according to circumstances. Calomel in one or two-grain doses, at intervals of three, four, or six hours, is the best mode of giving mercury by the mouth. If deglutition is difficult or the patient is indisposed to unclothe the jaws, the mouth may be opened forcibly and the remedy in powder smeared upon the tongue with butter or other unctuous matter. This proceeding, upon frequent repetition, sometimes induces sore or excoriated fauces, and such irritation may become so painful as to be actually prejudicial. Under such circumstances, the mercurial ointment may be rubbed upon the skin so as to insure its speedy absorption. The effect of calomel, when once it has entered the system, is very marked in some cases of recoverable commotion. The copious and more regular relief of the bowels, the clear indications of returning sense and power conveyed by gesture and articulation, the disposition to take food, the compressible pulse and tranquil respiration, all point to the steady and progressive relief of the brain and its investments. There is still some complaint of pain, and

in bad cases, for a time, a paralytic condition of one of the nerves of sense—as smell or hearing—is observable, there is perhaps ptosis of one eyelid, an arm is benumbed, or one side of the body feels colder than its opposite; but these effects are transient, or at least may be permanently relieved if not entirely removed by careful after treatment.

This after treatment is a very comprehensive term. It includes attention to repose and diet, uniformity of temperature, and an entire abstinence from stimulants of all kinds, together with all provocatives to mental excitement. In certain cases of slow reaction some surgeons carry the principle of non-interference to a hazardous length. They affirm, that if the patient cannot sleep after the injury, medicine does little or no good. A proposition of this kind must be received with caution, but I am willing to admit that surgical or medical interference may be ill-timed, and to that extent very prejudicial in its results.

PART III.

OF IRRITATION AND INFLAMMATION: QUESTION OF OPERATION: APOPLECTIC CELL.

The action terminating in the formation of a circumscribed abscess in the substance of the brain is an inflammation, and the retained matter so produced, sets up an irritation of that organ. The angular depression or projecting spiculum of a cracked internal table of the skull produces irritation which, if it continue, provokes inflammation, evidenced by pain and febrile excitement during life, and by the appearances of thickening and effusion after death. It is of importance that the distinction no less than the connection between these two states of irritation and inflammation should be accurately recognised. If the subject of cerebral irritation be exposed to extreme measures of depletion, a fatal exhaustion may supervene, but they are wholly inadequate to relieve such a condition either in its cause or consequences. Surgeons of the present day have a deeper interest in the matter than their predecessors, from the knowledge of the operation of such an agent as mercury, which may well inspire them with confidence in the treatment of many cases not formerly remediable, and suggesting no alternative to the performance of an operation fraught with risk and extreme uncertainty.

The point at which irritation assumes the modified character of compression, is sometimes difficult of determination, but the symptoms which call for interference on the part of the surgeon seldom admit of doubt. We are not on these occasions to wait for laboured or sonorous breathing, a fixed pupil, and the course of direct pressure. Where there is a neuralgic or paralytic state of one or more members of the body, with slow and imperfect perception, impaired sense and memory, difficulty of speech and deglutition, atrophy or evidence of a permanently disturbed circulation, an operation is as plainly called for as though the local signs of compression were palpable to the sight and touch. Tenderness or pain on pressure, cir-

circumscribed and persistent, point to the site of such operation, whether it consists in simple division of the pericranium, or trepanning the skull. In these cases of the remote effects of injury, the presence of matter, bony spicula, diseased or necrosed bone with meningeal reparation, nay, sometimes even a slight thickening of membrane may give origin to symptoms which will usually be found to correspond in intensity to the amount of local change. In recent cases of fractured skull I believe the rule of not operating where there are no symptoms, to be a good one. A departure from this practice is certainly justifiable in the case of wound with fracture and depressed bone. Be the symptoms what they may, displaced and exposed fragments should be elevated if not removed. If left, they tend to provoke inflammation, which usually commences after the lapse of a few days and terminates in a destructive change with effusion on the surface of the dura mater. If removed at once, the patient being rid of such a grave cause of irritation before the parts are spoiled by disease, or rendered unfit to sustain a process of healthy repair, the system at large responds to the full extent of its powers, as yet unimpaired by medicine, and not debilitated by prolonged illness. The reverse of this is the result of waiting until signs of irritation arise. If inflammation of the brain or its membranes be not stopped at the outset, its fatal termination is seldom prevented. An irritation, on the contrary, need never be despaired of; whilst there is life there is hope. In either case the other organs of the body sympathise widely, and with variable effects, upon the constitution. The nervous power may be excited, depressed, or altered in its action, without immediate risk to the life of the individual, but the circulation, to maintain life, must be at once restored to its original freedom.

Chronic apoplectic lesion, though a purely local change, depreciates the quality of the nervous influence, but does not directly interrupt its course and operation; it is the crisis of a slow morbid action, of which the other organs of the body have all had warning, and for which they are in some degree prepared. This is not the case where the system has been taken by surprise by sudden lesion of a healthy structure. Laceration of the substance of the brain produced by injury is always fatal. In the first case, the powers of life having themselves undergone a previous diminution, are no longer capable of being very suddenly impressed by the occurrence of a minute lesion which, though critical, is but another stage or step in the progress of existing disease. Apoplectic cell therefore, unless it be large and rapidly formed, does not alarm the centres like a sudden tearing of the sound tissue. There is no immediate counter-action excited for purposes of limitation or repair; but the case is otherwise after recent injury. There the resistance and reaction commence at once and vehemently, though ineffectually, for the heart and arteries now no longer respond to the necessities of an organ, which under the circumstances they are unable to restore. As the connections of the brain are universal, it may be approached circuitously, as

well as by the direct road, and sometimes with more advantage where there exists a tendency to relapse. Symptoms can never be too closely watched, nor power too carefully estimated, in dealing with a part so prone to rapid and dangerous reaction.

44, Dover Street, Piccadilly,
November 9, 1849.

REMARKS, HISTORICAL AND PRACTICAL, ON DISEASES OF INFANTS.*

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We have seen that towards the close of the last century, the subject of infantile diseases was beginning to engage the attention of eminent medical practitioners, and that considerable progress had been made in the knowledge of that department of medicine. But in the present century, both the interest in the study of the diseases of children, and the knowledge of their character and treatment, have increased in a ten-fold degree. Indeed, so many excellent works on the subject have made their appearance within the last 30 years, that it is difficult either to particularize them, or to point out their comparative merits and claims to the attention of practical men. It would be a needless waste of time to attempt to analyse the contents of each of these works, or even to point out the peculiar views of each writer. In our own country, besides the various editions of Underwood which have continued to emanate from the press, the works of Coley, Clarke, Joy, Copland, Davis, Bennett, Evanson and Maunsell, Willshire, West, &c.; and of Capuron, Billard, Gölis, Legendre, Guersent, Rilliet and Barthez, on the Continent, have contributed largely and satisfactorily to our stock of information upon the various subjects of which they treat. Dr. Bennett's treatise "On Hydrocephalus" ought to be read by all who desire to understand the nature of that unmanageable disease; and the work recently published by West, "On the Diseases of Children in General," well deserves an attentive perusal; but, for minuteness of description and profundity of research, the works of Billard, Rilliet and Barthez, have no parallel in this country. Billard's work was published in 1828, and has since gone through several editions. It is devoted entirely to the consideration of the diseases of new-born and nursing infants, and describes the development of the spinal marrow and brain, before entering upon the nature of the affections of the encephalon. The necessity of considering together the science of organization and the clinical observation of diseases, especially where the nervous centres are concerned, is a point in the pathology of new-born children which is frequently neglected or forgotten, notwithstanding the affections of early infancy must necessarily be greatly modified by the progressive

development of the brain. Billard describes the various changes which take place from early pregnancy to the birth of an infant, shewing that, from birth to the age of one year, the brain of a child is in a true state of transition, and adds, "we frequently see during the first periods of life, great alteration in the organs, unaccompanied by any febrile reaction, any general symptom, or any morbid sympathy; but at the end of the first year, everything assumes a new aspect; fever, which is scarcely ever seen in new-born children, here makes its appearance on the slightest cause; hence the restlessness, cries, spasms, nervous mobility, so common, so easily excited, and at the same time, so transient, in children who have passed the period of infancy. These considerations will prove to us the difficulty of studying the diseases of early infancy; the cause is evidently in the organic imperfection of the encephalon, which cannot reveal to us the signs and external symptoms of these diseases."

In taking a general view of what has been written on cerebral diseases, we shall be struck, not so much with a deficiency of knowledge as to their character, pathology, or symptoms, as with the indefinite and unsatisfactory methods of treating them. This defect is probably due to the excessive desire manifested to base principles of treatment upon *post-mortem* appearances; but, whilst the latter, although fully known and accurately described, vary so much in relation to the symptoms they are supposed to occasion, how can the former be depended upon for safely averting the great dangers we have to encounter? There is yet much—very much, to be learned in the treatment of these diseases. In what manner can such knowledge be most readily and perfectly obtained? The investigations hitherto made upon this subject, enable us to determine certain generalizations, and to state a few established facts, which afford useful hints for practical application.

1. Cerebral diseases occur most frequently in children of a scrofulous habit, or born of scrofulous parents.

2. Scrofula greatly modifies the character of cerebral as well as other diseases.

3. Cerebral diseases may exist independently of scrofula.

4. Headache, vomiting, constipation, and more or less pyrexia, are a combination of symptoms denoting, in children, serious, and often unmanageable cerebral disease.

5. A species of hydrocephalus, chiefly indicated by the preceding symptoms, is generally accompanied with, or depends upon, tubercular disease of the brain or its membranes.

6. There exists another species of hydrocephalus, attended with the usual symptoms of phrenitis, of a strictly inflammatory nature, and curable by strictly antiphlogistic remedies.

7. Hydrocephalus resulting from tubercular disease may assume an active inflammatory type, and be scarcely distinguishable from the last variety, except from its not being so amenable to antiphlogistic treatment.

8. Symptoms similar in many respects to those of acute hydrocephalus in one or other of the above forms,

may arise from a state of system diametrically opposed to inflammation; these are curable only by a nourishing and mildly-stimulating plan of treatment.

9. Hydrocephalus, generally speaking, does not occur before the age of two years; and boys are more liable to it than girls.

10. Treatment, to be effectual, must be commenced at an early period of the disease.

11. The symptoms of cerebral diseases in children, and the *post-mortem* appearances, have not a definite or constant relation to each other; and the former are more to be depended upon than the latter for indications of treatment.

12. Constipation is not essential to the phrenitic variety of hydrocephalus.

13. Certain cases, accompanied with symptoms so constantly in connexion with tubercular encephalitis as not to be distinguishable from the latter form of disease, admit of being cured; and may therefore be fairly considered as instances of the *curability* of a disease which is generally supposed to be incurable. (See cases by Professor Golfin, *Revue Medico-Chirurgicale*, Vol. ii. Also in *Medical Gazette*, Vol. xxx., p. 811; Vol. xxxv., p. 703; Vol. xxvii., p. 323 and 671; Vol. xxxi., p. 23.) These, and many other similar cases that might be quoted, prove the disease to be, sometimes at least, curable; and the contrary opinion cannot but exercise a very prejudicial influence upon the prognosis and treatment. If we believe a disease to be incurable, we are apt to relax in our efforts to subdue it; and shall thus probably remain in comparative ignorance of what, after all, is the most important subject for investigation, namely, the best method of treatment.

The treatment of diseases of children requires considerable tact and discrimination, both as to the nature of the remedies to be used, and the mode of employing them. We have tender bodies to deal with; their period of life greatly modifies the action of medicines; errors of judgment in prescribing are of more serious consequence, and life is altogether in greater jeopardy. It is often necessary to reduce arterial action, and *blood-letting* is sometimes attended with success, but in very young children this is a dangerous remedy, and probably not a few have fallen a sacrifice to its depressing influence. The usual method of drawing blood in children is to apply leeches, and children have bled to death from leech-bites. Cupping is an operation not easy to perform in children, but it is preferable to leeching, because by it the quantity of blood to be abstracted can be regulated, and the bleeding can be stopped as soon as enough blood has been removed. Blood-letting, as a remedy, is fortunately seldom indispensable at the period of life in which children are most frequently affected by cerebral diseases; my own experience would almost say *never*; for in a period of more than fifteen years I have never myself drawn blood, either locally or generally (save by scarification of the gums or eyelids,) from a child under six years of age, for any complaint whatever. How then are inflammatory complaints to be treated? What are we

to do in a case of phrenitic hydrocephalus, if we are not to bleed? Are we possessed of any other effectual means of combatting inflammation? Yes: we have many other resources for lessening vascular action in children, which will oftentimes enable us to spare a fluid so necessary to existence, and so often wanted in later periods of diseases, when it is difficult, if not impossible, to supply it. The *warm bath* is a powerful agent for relieving the circulation in infancy; *antimonial medicines* will reduce power to almost any necessary amount in children; *purgatives* also; but owing to the extreme susceptibility of the intestines of children to take on irritation with which the brain very quickly sympathises, it is not often advisable to use them freely; we may, however, safely employ enemata, which have the effect of reducing the pulse and lessening heat of skin in a very satisfactory manner, as well as of removing offending matter, and encouraging a flow of bile. But there is another class of medicines both safe and effectual for abating inflammatory affections in children, provided the stomach be not too irritable to retain them. I mean *diuretics*; and I have repeatedly observed, whether in fevers or inflammations, that promoting a copious flow of urine has, in a striking manner, produced an antiphlogistic effect. These measures may be employed also in combination, and when they are thus combined and judiciously applied, I have yet to learn that they are not capable of effecting as much for the removal of febrile action, with scarcely the possibility of doing harm, as is usually effected by blood-letting. In the more advanced stages of inflammation, *calomel* for the removal of lymph, and *iodine* (Liq. Potassii Iodidi Comp.) for the absorption of effused fluid, are well known and trustworthy remedies.

But the history of the cerebral diseases of infancy proves that in some cases these measures even might be attended with fatal prostration, although the general symptoms differ scarcely at all from those which accompany acute inflammatory diseases of the encephalon, requiring strict antiphlogistic regimen; for instance, in certain cases of hydronephaloid disease commencing with febrile disturbance. Under such circumstances how are we to determine whether to depress or to support, when to lessen power and when to stimulate? In doubtful cases, an error in judgment, so likely to occur, may irretrievably turn the scale; and we ought to give the patient the benefit of the doubt, rather than run the risk of removing all chance of recovery by too great activity of treatment. It is perfectly wonderful how, in circumstances the most desperate, nature will display her restorative powers, when they are not interrupted, but only carefully assisted, by treatment.

In endeavouring to make out correct indications of treatment, a minute attention to symptoms will avail us as much as a reference to the supposed pathological condition of the organ in which the disease is situated, in very many instances of cerebral disease. It is generally acknowledged that scrofula almost always coincides with disease of the brain in children, and that it always modifies the character of inflammation wherever

located; when, therefore, we have distinct evidence of scrofula, let our treatment of the inflammation be modified according to this constitutional defect, and let us beware of excessive or prolonged reduction of vital power.

The occurrence of *pyrexia*, in the diseases of children, is an important guide to treatment. If a child have slight difficulty of breathing and hoarseness, and there be no fever, we attach but little importance to these symptoms, and they may generally be removed by simple remedies; but when fever is present also, they indicate, probably, the approach of a severe malady. A child may experience sickness, and pain in the body, of doubtful import, but if these symptoms be unaccompanied with febrile action, and the pulse remain quiet, we shall consider them without alarm, and confidently expect to remove them. So also in head affections, unattended with fever, we ought not to resort hastily and actively to depletory measures, however much we may be inclined to suspect the existence of certain pathological conditions supposed to require antiphlogistic treatment. But there may be febrile excitement in a case where antiphlogistic treatment would be fatal. How are we then to judge? If the fever be of an intermitting character, leaving the patient feeble and depressed in the intervals, the pulse being unsteady and variable, it behoves us to be guarded in our employment of lowering remedial measures.

There can be no question that the proper mode of attacking a disease, of whatever nature it may be, consists in first ascertaining as nearly as possible its intimate character, its natural course and termination, and what are the lesions with which it is usually connected, and afterwards to adopt our remedies accordingly. But these are not the only considerations required; we are not to mark out at once a determinate object or indication, to be fulfilled by particular means, and to adhere to one undeviating method of procedure, without reference to the changes or modifications which may occur in the progress of the case;—we are not to steer straight for a destined port, regardless of the storms or winds we may encounter in our voyage which may render deviations from our appointed course not only desirable, but necessary to ensure our safety. The indications of treatment in acute hydrocephalus are to remove inflammatory action, and to promote the absorption of the products of that action; but if we discover signs of debility coexisting or alternating with febrile symptoms,—if we notice a weak, feeble, irregular pulse, or what is a far better guide in infancy than the pulse, *coldness of the cheeks*, with a tendency to coldness of the extremities,—however severe other symptoms apparently connected with increased action may remain, we cannot persevere in the employment of antiphlogistic or depressing measures without incurring the risk of being suddenly called upon to administer cordials and nourishment to sustain the feeble or expiring powers; and this, in many instances, when too late to prevent a fatal issue.

The following circumstances seem especially deserving of attentive consideration in the treatment of the diseases of infancy and childhood:—

1. The delicate, perhaps only partially-developed, structure of the vital organs, the intolerance for the most part, of powerful medicines or doses, and the great restorative powers of nature at an early period of existence.

2. The necessity for adapting our remedial agents to the delicacy and susceptibility of the structures they are intended to influence, and fulfilling any given indication of treatment by the least possible violence or precipitancy, by the gentlest means.

3. Whilst entertaining a just idea of the nature and history of the disease we have to treat, we must at the same time observe particular symptoms minutely, and vary our plan of treatment according to the information which those symptoms are capable of affording.

4. The importance of endeavouring *to the very last* to preserve life, however desperate the circumstances may appear, keeping always in remembrance, that "whilst there is life, there is hope."

ON THE TREATMENT OF CHOLERA BY QUININE AND IRON.

By WILLIAM STRANGE, M.D., Bridgnorth.

To C. W. Bell, M.D., Manchester.

MY DEAR SIR,—I should not have addressed you thus publicly on the subject of cholera, had I not felt that the principles so ably advocated in your published lectures on the subject were in some danger of being overlaid, by your exposition of the character of the late visitation, as given in your letter to Dr. Hall, of Exeter, and published in the last number of this *Journal*.

Although I have had some experience of the epidemic in its recent manifestation, I have waited patiently, expecting, from week to week, to see some confirmation of your views, and some successful results of the treatment recommended in your lectures, make their appearance in the pages of our *Journal*; for I could not but believe, after my own experience, that as many had, doubtless, read those lectures, so many must also have put into practice the treatment there laid down. However, whatever may be the result of the experience of others, I, for one, cannot *now* refrain from testifying to the great value of which the theory propounded by you has proved at the bed-side, not only in my own case, but in those of several of my friends also.

In common, I doubt not, with most other provincial practitioners, no sooner did the rumour reach me that the cholera had begun to make progress through our land, than I set about to make myself acquainted with the published experience of others as to the character and treatment of the disease, as it had before shown itself amongst us. Many, I have no doubt, will bear me out when I say, that no candid enquirer could feel satisfied with the confused and discordant theories, and

the equally heterogeneous indications of treatment resulting therefrom. To my mind no *pathology* of the disease, worthy of being so called, existed; at least, I met with none.

In the midst of all this doubt and fear the disease made its sudden appearance amongst us; and all of us, I fear, at the onset, commenced the treatment with more weapons than we could wield with advantage to our patients, or credit to ourselves. Astringents, opiates, calomel, (in large doses and in small, in combination with everything or anything, or in all its single nakedness,) emetics, purgatives, stimulants, sedatives, tonics, alteratives, heat and cold, were, many of them, simultaneously, and all of them consecutively, had recourse to. After treating a few cases in this way, but chiefly with repeated doses of calomel, with external heat to the surface of the body, and observing the unsuccessful results, I had my attention again directed to the theory of the disease as propounded in your "Lectures." Having carefully perused it, I felt persuaded, from what I had now myself seen, that no other theory of the disease with which I was acquainted could nearly so well account for all the symptoms, and that, consequently, no other treatment was so likely to prove successful as that by quinine and iron; and I cannot easily express what a comforting and invigorating effect was produced upon my mind by the feeling that, *now*, whether right or wrong, I had at last a clear and logical idea of the disease in my mind, to guide my hand at the bed-side of the patient.

The result of this change of treatment, as it was to my mind too important to be slurred over in a few general observations, so—to be of any service to my professional brethren—does it require some statement in detail. I may premise that, between the 24th of July and the 22nd of September, when the first and last fatal cases occurred, there were in all about 180 cases of developed cholera treated in this town, sixty-nine of which proved fatal, besides six or seven fatal cases of diarrhoea or dysentery. No epidemic diarrhoea existed to any amount previous to the appearance of genuine cholera, nor did the cases of the former and the latter become at all confounded together afterwards; notwithstanding, there were at least 1000 cases of derangement of the digestive and circulatory organs treated during the prevalence of the epidemic, and one-half of the adult population was more or less indisposed. The symptoms of this minor complaint, which I have called the *choleraic malaise*, were, in almost all cases, undoubtedly those of deranged capillary circulation; many no doubt exhibited hepatic symptoms, but this was by no means the rule. There was a pinched and shrivelled appearance of the face and skin, a small pulse, chilliness of the surface, with pinching pains in the muscles of the limbs and abdomen. After a day or two these feelings were followed by loss of appetite, perhaps vomiting and some purging, or else obstinate constipation, weariness, with mental lassitude, and depression of spirits. These symptoms, if unattended to, in some instances undoubtedly passed into cholera, which was then nothing more than an exaggerated state of all the

previous conditions. The pinching pains passed into cramps, and the oppression of the stomach and deranged state of the bowels into continuous vomiting and purging; first, *of course*, of all the matters previously contained in the alimentary canal; then of the squeezings and pressings of the liver and mucous membrane of the stomach and intestines; and, finally, of the exudation of pure serum. The chilliness of the surface became increased until nearly all warmth had left it; the tongue, *always a little cold from the first*, felt like the back of a frog, and the hands and feet put on exactly the appearance which all of us have so often seen on the tables of the dissecting room—shrivelled and dried. How far the genuine cases of epidemic diarrhoea, and dysentery, which might, perhaps, have passed into cholera, or, according to your view, upon which choleraic symptoms may have been superimposed, differed from the disease as now described, I will leave for the present undetermined.

By developed cholera, then, I should wish to imply that condition of the patient in which, with or without the previous existence, for a few hours, or days, of the minor symptoms specified above, most or all of the following symptoms were present, viz.:—A shrunk or shrivelled state of the skin of the face, hands, and feet, or perhaps of the body generally; a sunken eye; hoarse or choleraic voice; more or less coldness of the surface, particularly of the extremities; a weak or perhaps imperceptible pulse, a tongue cool or cold, flabby, pale, and clean, with the exception of a slight coating of creamy saliva; vomiting and purging—one or both—of a serous fluid, having a faint odour of blood or serum, the color of which was either that of rice-water, or as in some instances, of clear water; cramps or spasms of some of the muscles, particularly of those of the abdomen, calves of the legs, fingers and toes.

Besides having had opportunities of seeing the disease in the practice of others, particularly where the treatment by bleeding, quinine, and iron, was adopted, thirty-one developed cases of cholera were treated by myself, out of which number nine were fatal. Several of these cases, however, especially at the first, had a mixed and unsatisfactory treatment, until having resolved to act upon the theory of capillary paralysis and congestion, I strictly adhered to the treatment as recommended by you, and the results of nineteen consecutive cases so treated, without regard to the condition of the patient or period of the attack, are briefly stated below. In some instances, however, there had been administered, either by myself or by others, a dose or two of some other medicine. Out of these nineteen cases, fifteen recovered and four died.

CASE I.—Roberts, (male,) aged about 32, intemperate, ill one day.—*Evening*: Diarrhoea (serous); vomiting incessant; cramps of the legs; small pulse; sunken features, with choleraic voice, extreme coldness of the feet, legs, and knees. No urine since last evening. Gave Dover's powder with calomel, and acetate of lead.—*Morning*: No relief; collapse, violent spasms, serous discharges in great quantity incessant. Commenced quinine and iron, two grains of the former in

twenty drops of the muriated tincture, every two or three hours. After twelve hours, relief to collapse and vomiting, purging still the same; more warmth of surface. Medicine not retained at first but was so afterwards. A pill of calomel and opium given, after which impending collapse three times. Resumed the treatment of quinine and iron, and continued it steadily for three days, during which time the case slowly improved. Cure in ten days. No urine for *eighty-four hours*. Nitrate of potash in drink, with linseed tea, to restore this secretion.

CASE II.—Adams, (male,) aged 30, temperate, weakly, seized suddenly whilst passing a heap of night-soil in the street, before breakfast. Collapse almost immediate, with violent serous discharges, cramps of the legs, coldness of extremities and tongue, choleraic voice, with copious cold clammy sweats. Was seen immediately: ten grains of calomel every two hours. Increase of symptoms. Then brandy-and-water, broth, &c., with some relief. Speedy relapse; pulseless for several hours. Quinine and iron in the same doses as in Roberts's case, given and continued for three days, during which two partial relapses, apparently from exposure to cold in getting out of bed. Severe salivation the third day, with excessive debility. Slowly recovered. The most marked effect of the medicine was upon the vomiting, which was always relieved immediately, and then upon the purging. The urine was also increased, and the heat of surface improved. The urine was never entirely suppressed. There was no consecutive fever.

I have detailed these two cases somewhat at length, because to me, who saw them, they afforded the most satisfactory evidence of the powers of the medicine to *combat the tendency to death*; and because they will serve to furnish a sample of the kind of cases in which the remedy was exhibited. I shall state the others more concisely.

CASE III.—Gething, (female,) aged 22, temperate, sudden attack, and seen early. Stimulants at first, with opium, with apparent relief; afterwards gradual collapse, intense pain in the lumbar portion of the spine, serous discharges, and cramps of legs and abdomen severe. Quinine and iron were given with relief; afterwards return of symptoms, apparently from exposure to cold in constantly getting out of bed, and want of attendance. Partially collapsed for seven consecutive days, with occasional serous discharges and severe pains in the lumbar region. Sickness much relieved by medicine, and the appetite soon returned. Slow recovery in three weeks. This patient did not recover until her removal from the house, through the back yard of which ran the *open town-sewer*.

CASE IV.—Roberts, brother of No. 1. Seen early, with immediate exhibition of the medicine, and cure in twelve hours.

CASE V.—Instone, (male,) 45, temperate, ill twenty-four hours. Mild at first, (catechu, extract of log-wood, and acetate of lead were given,) then serous

discharges; not collapsed; pulse very weak; but little cramp of legs; coldness of feet and knees. Gave iron and quinine for two days, vomiting soon allayed, but purging continued; pulse and appetite returned; urine increased. Cured in five days. No consecutive fever.

CASE VI.—Tongue, (male,) 35, intemperate. Just collapsed when seen; ill twenty-four hours, having been drinking the day before. Voice gone; pulse scarcely perceptible; cold clammy sweats, with coldness of tongue and extremities; legs, feet, and hands, blue and shrivelled. Quinine and iron given every two hours. Relief in four hours; voice stronger; warmth returning to extremities, and pulse easily perceptible. In twelve hours collapse gone, secretion of urine, and cure in twenty-four hours. Partial return of collapse from eating *toasted cheese*.

CASE VII.—Knibbs, (male,) 60, temperate, but weak. Symptoms not very severe; cramps of belly and legs two hours, with severe purging; no vomiting, nor choleraic voice. Seen early, and the medicine given, with speedy relief to all the symptoms. Slow recovery owing to debility. Urine not suppressed.

CASE VIII.—Davis, (male,) 62, sometimes intemperate. Seized suddenly and brought home a distance of four miles in a dung cart. Seen immediately; collapse commencing. Bleeding to twelve ounces, with relief; quinine and iron every three hours, with heat to the surface. The cramps and choleraic voice yielded to the bleeding, and the cold clammy sweats were exchanged for warm perspirations. Great relief and perfect freedom from cramps in twelve hours, and cure in twenty-four hours. No consecutive fever.

So far all appeared to go on swimmingly; but as the remedy was to be given to all cases and in all stages of the disease, a reverse was to be expected so soon as cases made their appearance in which the vital powers had been irrecoverably depressed, by the virulence of the disease, before help could be obtained.

CASE IX.—Evans, (male,) 30, sometimes intemperate. A fortnight before this attack had been seized with vomiting and purging after a day's debauch. Relieved by purgatives. After this time the bowels were always in a semi-relaxed state, with griping pains and numbness of the extremities. He went on drinking till he was seized (twelve hours before seen) with confirmed cholera. There were violent serous discharges, cramps of legs and abdomen, suppression of urine, pulse scarcely perceptible, and choleraic voice. The coldness of the extremities and desire for fresh air were extreme. He was bled to four ounces; fainted; algid state increased, and the respiration became more laborious. Quinine and iron were given without effect, and finally æther, ammonia, and other stimulants. Died in twelve hours from my first seeing him. In this case, from the long-continued action of the causes of disease, (for a fortnight or more) the collapse, when it did arrive, was so complete as to bid defiance to any medication.

CASE X.—Evans, 30, wife to Case 9. Intemperate. Symptoms of approaching cholera made their appearance during attendance upon her husband, during which time she was deprived of rest, and continued drinking brandy. After his death she still continued to drink porter and brandy. When first seen, the discharges which had been bilious, were become serous; there were severe cramps and coldness of extremities, without discolouration of skin; voice not much altered; urine scanty; pulse hardly perceptible. Quinine and iron, which were given early, but not taken regularly, had the effect of rousing the pulse, and improving the warmth of skin, but vomiting continued. After six hours more the cramps increased, the pulse became imperceptible, the discharges stopped, and she died twenty-four hours after her husband. This woman was sadly neglected, having herself to rise from bed to let me into the house ten hours before her death.

In the back yard of the small house in which these two persons lived, was an accumulation of 10 cwt. of pig-food, consisting of wash and refuse, the collection of two years. There was also in the kitchen an open grating, which led at once into the sewer which ran under the house. The stench from these continued nuisances was horrible, and there is no doubt that this spot became a focus from which infection spread in the atmosphere to all the surrounding neighbourhood, as cases of nearly equal severity immediately followed these in the low houses adjoining and neighbouring thereto.

CASE XI.—Davis, (female,) aged 30, temperate, weak, and ill-nourished. This woman was wife to Case 8, and the yard adjoined that of Evans. At first the attack was mild, and bleeding not resorted to, but quinine and iron had the effect of restoring the circulation, relieving the vomiting, and removing the cramps. In twelve hours convalescent. From want of nourishment and insufficient bed-clothing, she relapsed on the third day. Quinine and iron failed now to restore the heat of surface; the pulse became imperceptible; the tongue and skin clammy and cold, and the voice choleraic. She gradually sank in sixty hours.

It should be noted that the nuisances next door still remained unremoved during the illness of all these persons. If this patient had been removed when first convalescent, I have no doubt but that she would have recovered. She was also dreadfully neglected in nursing.

CASE XII.—Broadfield, (male,) aged 50, very intemperate. Comparatively mild attack, and seen early. All other symptoms of cholera except suppression of urine. Quinine and iron stopped the discharges in two hours, and cured him in twelve hours.

CASE XIII.—Roberts, (female,) aged 30, temperate. Mild case, and seen early. Severe cramps, and pain in the spine and back part of the thighs, the most prominent symptoms. Pulse small, and features much sunk. Voice choleraic. Quinine and iron given at once, with relief to the cramps and pains of spine; increase of urine, and improved voice. Afterwards, much pain

continuing in the lumbar region, an opiate was given. The symptoms returned, and were again relieved by the quinine and iron. Cure in three days.

CASE XIV.—Hill, (male,) aged 45, tolerably temperate. This was a most successful instance of the treatment by bleeding, quinine, and iron. Seized suddenly with violent spasms and serous discharges, coldness of extremities, and almost imperceptible pulse. Bled to sixteen ounces, with heat to the surface, and frictions. Warm perspirations immediately followed the relaxation of the skin; the urine flowed copiously; the vomiting was relieved, and he continued steadily to improve, so that in twenty-four hours he was convalescent. Cure in three days. No consecutive fever.

CASE XV.—Smith, aged 45, temperate, but weakly. Severe diarrhoea twelve hours before seen. Stimulants and opium administered by another gentleman. Twelve hours after all the symptoms worse. There was choleraic voice, coldness and shrivelled extremities, very small pulse, violent serous discharges, but urine not quite suppressed. Gave quinine and iron, which slowly improved the pulse and heat of surface. Sickness and purging continued. Astringents and moderate opiates again given without relief. Now larger doses of the former medicine, with relief to all the symptoms except the vomiting and purging, which continued for four days. Cure in twelve days.

CASE XVI.—Price, (male,) aged 70, temperate, but had suffered privation. In this case, which rapidly ran on into collapse, the medicine was steadily given, sometimes with ether, but without any further effect than that he remained collapsed three days, when he died.

CASE XVII.—Brown, (male,) aged 35, a strong muscular man, intemperate. Another striking instance of the good effects of prompt bleeding. Seen early, with severe cramps of abdomen, serous discharges, and coldness of extremities. Urine normal. Bled to eighteen ounces, with heat to the surface, and frictions. Immediately warm perspirations resulted, and the cramps were relieved, which afterwards returning, were relieved by quinine and iron every four hours. Cure in twelve hours.

CASE XVIII.—Price, (female,) aged 60, temperate. Had been nurse to the two Evans's, and lost much rest, besides having been compelled to breathe the infected atmosphere of that filthy place. At first bilious cholera, with yellowness of skin and urine. Hydrarg. cum Cretâ at first given by another practitioner, afterwards I gave five grains of calomel. Severe salivation, extreme debility, and now, serous discharges, cramps, coldness of surface, voice choleraic, urine not suppressed. Quinine and iron relieved the cramps, and gave warmth to the surface. Purging and vomiting continued. Motions afterwards again became bilious, and slow recovery in eight days.

CASE XIX.—Mr. G., a respectable person, but rather a free liver. Twelve hours before seen. Violent

serous purging; now choleraic voice, extremely shrunk features; blueness of fingers; pulse scarcely perceptible. Not bled, as I feared to lower the system. At first, by his desire, powerful astringents, catechu, logwood, and acetate of lead; no effect: passed through the alimentary canal unchanged. The iron and quinine given steadily, with relief first to the vomiting, afterwards heat returned to the feet and legs, the voice and pulse improved, but the purging continued. Cure in two days, when the urine became excessively copious.

Without now occupying your time with unnecessary generalizations, I will merely observe, as I think a fair deduction from the results of practice above given, that in those cases where any kind of medication might be expected to succeed, there undoubtedly the quinine and iron, especially if bleeding had been first practiced, were effective in removing the symptoms. And, if I am not riding my hobby too hard, I should say that the relief so given was, in most cases, exactly in the order which we should, upon the theory of capillary paralysis and congestion, be led to expect. Where bleeding was used, the first good effect was a relaxation of the contracted and shrivelled skin, the pores of which, before morbidly compressed, now poured forth their secretion copiously. As a necessary consequence of this relief to the cutaneous circulation, the heat of the surface returned, and the internal congestion was so far overcome, that the heart had no longer to struggle against the *vis inertia* of the gorged vessels, and could resume somewhat of its former force. The urine, the suppression of which will have been remarked by all who have had much experience in cholera, to be the crowning symptom of the disease, began to return soon after the exhibition of the medicine, and the relief of the congestion, for the reason that it had not been suppressed until the highest point of congestion had been reached. Relief to the vomiting was almost invariably prior to that of the purging; for, during the action of the remedy, the still remaining congestion continued to relieve itself by the ready outlet of the intestinal mucous membrane.

In conclusion, then, Sir, as I must not longer trespass upon your time, or upon the valuable space of this *Journal*, I will remark that, so fully do I feel the value of the theory of cholera, which was propounded by you some months ago in your published lectures, and the concordance of all the symptoms of the *true disease* with that theory, that I would, if it were again to visit my neighbourhood and exhibit the same features, rely solely upon bleeding to relieve—first, the cutaneous vessels, and upon a combination of iron and quinine to support the flagging action of the capillaries, until the depressing effects of the poison—if indeed there be a poison—should have passed away.

I believe that I can now remember cases in which, in accordance with your last remarks, a mixed treatment might have been useful, as the cases were of a mixed character; and many cases no doubt there were, of epidemic diarrhoea or dysentery, which a casual observation might have confounded with true cholera.

Most of these, in this neighbourhood at least, were of a mild character, and yielded to purgatives on the one hand, or calomel and Dover's powder on the other. That these cases, which I believe were often enough confounded in practice with incipient cholera, were entirely distinct from it in their nature, I have no doubt, otherwise how can we account for the readiness with which they yielded to such mild means as aromatic confection and chalk mixture? All the practitioners here agree with me, that the cases of cholera were such from the *first*, and that the symptoms ran on to their termination, in fatal cases, unchecked by any treatment. On the other hand, the extraordinary universality of the minor complaint, (the choleraic malaise,) and which exhibited all the symptoms of approaching cholera in a milder degree, were curable by one or two doses of the iron and quinine, whilst they obstinately resisted treatment by stimulants, opiates, or calomel. In this town and the surrounding neighbourhood, therefore, as in Wolverhampton, Dudley, Bilston, &c., where the disease was equally rapid and fatal, I should conclude that the essence of it was capillary paralysis and its consequent congestion, from the first.

WM. STRANGE, M.D.

Bridgnorth, Salop, Nov. 19, 1849.

Hospital Reports.

QUEEN'S HOSPITAL, BIRMINGHAM.

CLINICAL REPORTS OF SURGICAL CASES UNDER
THE CARE OF PROFESSOR SANDS COX, F.R.S.,
SENIOR SURGEON.

Reported by THOMAS WHITTALL, Esq., Resident
Medical Officer.

CASE III.—SECONDARY SYPHILIS.

Thomas Pearsal, aged 30, ostler, of a fair complexion and healthy appearance, admitted under the care of Professor Cox, September 29th, 1846. Complains of several ulcers upon his legs, arms, and other parts of his body; they are superficial, and somewhat inclined to a copper colour; they are of a definite shape, some inclining to an oval, others being circular. The surrounding tissues are reddened with inflammation. The constitution does not appear to suffer in any respect, the patient complaining of nothing except the ulcers and a slight aching pain in the bones. He has no sore-throat, neither does his hair fall off.

History.—The ulceration commenced in July last, when they first appeared as inflamed surfaces; since that time they have continued to increase in number and in size. The patient states that he has had primary syphilitic sores upon the glans penis about three years ago, for which he was under surgical care in Salisbury Infirmary, where he was cured, since which time he had been free from any symptoms of disease until the appearance of the ulceration. Ordered to have poultices

applied to the ulcers, and to take Pil. Cathart. ij. omni nocte.

October 5th.—Inflammation around the ulcers has somewhat subsided. R. Pot. Iodid., dr. ss.; Extr. Sarz., dr. iij.; Aquæ, oz. viij. Misc. Cap. oz. j. ter die. Sumat Pil. Hyd. Chlor. Co. ij. alt noct. Ulcers to be dressed with black-wash.

8th.—Ulcers have assumed a more healthy appearance. Cont. omnia.

17th.—Continues improving, and granulation is evidently progressing. Cont.

24th.—Some of the ulcers have entirely disappeared, the others are doing well. Cont. Omnia.

November 7th.—From the date of the last note the granulation and cicatrization have been progressing favourably, and the patient leaves the hospital this morning, having all the ulcers healed, with the exception of one upon the left leg, which is not quite covered with cicatrization, but evidently tending to that process. Discharged cured.

REMARKS.—That this case arose out of a vitiated state of the constitution there can be but little doubt, because no other cause can possibly be assigned which would account for the symptoms presenting themselves. No local injury of any kind had occurred; and, moreover, supposing such injury had occurred, it is not common for ulceration in various parts of the body to follow an injury which is local. Ulceration following a local injury is generally confined to the spot upon which the injury is inflicted, unless, indeed, it happen to a constitution already debilitated with disease, or is extensive in its character, which does not appear to have been the case in the present instance. Since, then, this ulceration must have been caused by some constitutional disease, the question arises, what was that disease? There are several reasons which seem to favour the assumption that these ulcers were syphilitic in their origin, these are:—

1st. The fact that the patient had had primary syphilis.

2nd. The peculiar colour of the ulcers.

3rd. The pains felt in the bones.

4th. The absence of any other assignable cause.

And to these we may perhaps add—

5th. The remedies by which the ulceration was cured, viz., Sarza, Pil. Hydr. Chlor. Co., and Pot. Iod., all of which remedies are those which are most useful in secondary syphilitic ulceration. It is true the ulceration was neither so extensive nor deep as we sometimes meet with it, but perhaps this may be accounted for by the long time which had elapsed since the primary symptoms presented themselves; and we may suppose that the specific virus was lurking within the system, and waiting for some opportunity to develop itself; that opportunity might have been afforded by some slight existing cause, which in a healthy person might be followed by no ill consequence, such for instance as a bad state of the digestive organs, a free use of intoxicating drinks, or exposure to cold.

The progress of the case presents no remarkable characters, the disease readily yielding to appropriate treatment.

Provincial Medical & Surgical Journal.

WEDNESDAY, NOVEMBER 28, 1849.

WE beg to draw the attention of our readers to the report of the Bristol Medico-Chirurgical Society, in the present number of this Journal, which contains a reply, by Mr. Swayne, to the report of Drs. Baly and Gull, on the cholera bodies discovered by Mr. Brittan and himself. We cannot but regret that, in the examination of this question, the opinions put forth by individuals should have been allowed to prejudice these gentlemen in their belief as to the accuracy of the experiments made by a body of scientific men, more numerous than themselves, and long accustomed to the use of the microscope. We cannot for a moment suppose them to have been influenced by a jealousy of a provincial discovery; the cause above alluded to is, therefore, the only one we can imagine likely to have induced Drs. Baly and Gull to treat the whole of the Bristol Microscopical Committee with a want of courtesy, and with an assumption of superior knowledge, which otherwise would be without reason as they are without excuse. And when it is considered that the Sub-Committee was appointed by the College of Physicians to make an investigation into the supposed discoveries at Bristol, and to judge of the correctness of certain facts, it is certainly to be deplored that the members of that Sub-Committee should have so completely adopted the tone of the partizan. Mr. Swayne has, we think, succeeded in making good his defence, and it still remains for future experimentalists to disprove or confirm the presence—whether constant or occasional—of these bodies. Meanwhile, instead of carping and cavilling at the accuracy of these asserted discoveries, it is incumbent rather upon the profession to show their gratitude to the Bristol Medico-Chirurgical Society, and more especially to its Microscopical Committee, for the industry, zeal, and talent, displayed in the prosecution of this interesting subject. It is true that an over-active imagination may sometimes require the curb, but if all inquiry is to be thus repressed, and observations, made with great toil and some danger, are to be at once denounced as unworthy of credit, much injury to science will inevitably result; and labours which can only be made endurable by the approbation of mankind,

will, in an arduous profession like ours, be avoided by all but those who make them the business of their lives.

IN spite of all the experience gained in this country and elsewhere since the first advent of cholera, so little progress has been made in its treatment when fully developed, that we are compelled to rely upon preventive measures, as the only means to be depended on in warding off the future attacks of this unmanageable disease. However much may be accomplished by improved drainage, by an ample supply of pure water, or by baths and washhouses for the poor, we think that it will always be necessary, whenever cholera may break out, to adopt the house-to-house visitation system, which has been found to work so well during the present epidemic.

We have received from the Medical Superintendent, Dr. Cooper, of Hull, the Report of the Sculcoates Union, in which the system has been carried out most carefully, and with an attendant success, which encourages us in recommending its universal adoption. The following passage in the Report explains the objects of the visitation system in such a clear and satisfactory style, that we insert it entire:—

“This system came into full operation on the 20th of last month, and I propose now to report briefly to the Sanatory Committee of the Sculcoates Board how far it has been carried into effect according to the instructions, and what have been the results of our operations; and especially to call attention to the present state of the public health, and the extent to which it may be thought necessary to persevere in or relax these preventive measures. In forming an estimate on these points it must be borne in mind, that the object of the visitation system is *prevention* rather than *cure*; it aims at searching out and detecting disease in its early and only manageable stages; because it is found that the poorer classes are too ignorant, too careless, or too apathetic to apply for a remedy spontaneously, until driven to it by symptoms which shew the case to be beyond human controul. Another intention of the system is to discover the location of the disease at any particular time, and to determine the point where it is most rife, and by concentrating our preventive force upon such points to check the evil in the bud. It further tends to give confidence, hope, and courage to the public mind at a time when these qualities are most likely to fail, and when their failure is attended with the most disastrous consequences. A further important result of the visitation system faithfully carried out is the discovery and exposure of nuisances in and about the houses and premises of the poor, which would otherwise escape detection; of these we have had many reported, all of which have received the notice of our inspector. Many destitute persons have also received relief by the same agency. Lastly, this

system is intended to provide certainly and promptly the best known means of succouring those unfortunates who have already become the subjects of the malady in its confirmed and dangerous form.

At the time of the publication of the Report, the system had been in operation for three weeks, during which time 2,600 cases of disease, in its various degrees, have been discovered by the medical and other visitors; 2,234 of these were simple diarrhœa, 218 were cases showing symptoms nearly allied to cholera, and 130 were discovered of confirmed cholera. It is highly satisfactory to know, that of the 2,234 cases of diarrhœa, only 10 passed into the stage of cholera, and of the 218 cases of rice-water purging, only five were fatal, 213 having been saved by early discovery and treatment.

It has been frequently alleged as an objection to this plan, that the poor have a great dislike to it, and the public are by it unnecessarily alarmed. The following paragraph in the Report, as far as it goes, fully disproves these assertions:—

“The unanimous testimony of the visitors is in favour of the high value which the poor set upon house-to-house visitation as a mark of attention to their well-fare; and of their readiness to give information and assistance, and their thankfulness for the relief afforded.”

An important modification of the original plan has been the establishment of an independent dispensary, at which the poor may be supplied with the drugs ordered by the visiting medical officers, and which in this instance seems to have worked most advantageously; but it does not appear from the Report how the funds for its support were furnished. Seven hundred and thirty prescriptions were dispensed within the first nine days of its formation, with the full confidence of the poor, and at cost price to the public.

Reviews.

Oratio ex Harveyi Instituto in Œdibus Collegii Regalis Medicorum habita, Prædie Calend. Julii. A.D. 1849. A. JOHANNES CARR BADELEY, M.D., Cantab., &c. London: John Churchill. 8vo, pp. 20.

ANNUAL orations are, for the most part, dull affairs, especially when, as in the present case, the subject prescribed is ever the same. He must be an ingenious man, indeed, who in the year 1849 can find anything new to say about Harvey and other worthies of a

remoter age; but Dr. Badeley has, we are bound to state, made the most of a thread-bare subject, and has, as far as the circumstances of the case will allow, continued to invest it with more than common interest. Of the style of the composition itself there can be but one opinion; and it is gratifying to find that there are at least a few scholars left in a profession which, though once distinguished as occupying the van of polite literature, has now so sadly degenerated in classical acquirements. Formerly, to be a physician, was to be a scholar—we fear that now the contrary inference would be nearer the truth with the majority.

Proceedings of Societies.

NORTH WALES BRANCH

OF THE

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

A meeting of this Branch was held at the Royal Hotel, Ryle, on Tuesday, the 6th instant. Present—Thomas T. Griffith, Esq., President, in the Chair; Dr. Cumming, Denbigh; Peter Williams, Esq., Holywell; Dr. Stubbs, St. Asaph; W. D. Williams, Esq., Menai Bridge; G. T. Jones, Esq., Denbigh; Price Jones, Esq., Ryle; Dr. Lloyd Williams, Denbigh; Dr. John Roberts, Bangor; T. Charles, Esq., Bangor; D. Kent Jones, Esq., Llangefni; Edward Williams, Esq., Wrexham.

Letters and communications were received from the following gentlemen, approving of the objects of the meeting, and regretting their inability to attend:—Dr. Williams, Grove House, Denbigh; Dr. Hughes, Mold; Dr. Whittton, Llangollen; J. Dickenson, Esq., Wrexham; W. Rowland, Esq., Wrexham; H. Williams, Esq., Llanrwst; Dr. Roberts, St. Asaph; J. Lloyd, Esq., Llangefni; A. E. Turnour, Esq., Denbigh; R. C. Roberts, Esq., Ruabon; R. P. Roberts, Esq., Ruthin; W. E. Hughes, Esq., Llanrwst, &c., &c.

The Chairman stated to the meeting that the objects for which they met on that occasion, were in accordance with those drawn up and published by the Parent Association for its own guidance, and adopted at a former meeting held at Bangor. He forcibly pointed out the many advantages that would naturally accrue to the profession in the principality generally, and to the individual members of the Branch Association in particular, from periodically assembling themselves together, when the results of each other's practice and experience might be mutually imparted, subjects freely discussed in which they all felt an interest, the common welfare of the profession advanced, its dignity maintained, and harmony and social intercourse cultivated; and concluded an able and eloquent address by urging upon the members of the medical profession in North Wales the importance of joining the Parent Association with the view of becoming members of “THE NORTH WALES BRANCH.”

Proposed by DR. LLOYD WILLIAMS and seconded by DR. J. ROBERTS, and carried unanimously—

“That this meeting, recognising the proceedings of a former meeting held at Bangor, on the 29th day of August, 1849, to consider and adopt measures for establishing a ‘North Wales Branch’ of the Provincial Medical and Surgical Association, and which, having subsequently received the sanction of the Council of the Parent Association, through their President, Dr. Hastings, does this day confirm and establish ‘The North Wales Branch’ of the Provincial Medical and Surgical Association.”

Proposed by PETER WILLIAMS, Esq., and seconded by D. KENT JONES, Esq., and carried unanimously—

“That all gentlemen present be added to the Local Council, with power to add to their numbers.”

Proposed by THOMAS CHARLES, Esq., and seconded by DR. LLOYD WILLIAMS, and resolved—

“That a general meeting of the members of ‘The North Wales Branch’ of the Provincial Medical and Surgical Association be held in the month of June, 1850.”

Additional subscriptions towards defraying the expenses incurred in establishing the branch were received—from Dr. Lloyd Williams, £1; Dr. Stubbs, £1; Edward Williams, Esq., £1.

Proposed by DR. CUMMING and unanimously approved—

“That the thanks of this meeting be presented to the President for his able conduct in the Chair.”

After the meeting the gentlemen present sat down to dinner, the chair being occupied by the President, Thomas T. Griffith, Esq., and the Vice-chair by one of the Honorary Secretaries, Edward Williams, Esq.; after which, “Success to the North Wales Branch” was cordially received, and duly honoured. The brief remainder of the evening was spent in social intercourse, and each one felt on separating that, in addition to the personal gratification afforded him in thus meeting his medical brethren, he had also contributed in some degree towards carrying out, and establishing on a firm basis, “The North Wales Branch” of the Parent Association—the formation of which may be fairly expected to produce those important results to the medical profession which have followed the establishment of other Branches of the Association.

BRISTOL MEDICO-CHIRURGICAL SOCIETY.

The second Sessional Meeting of the Bristol Medico-Chirurgical Society was held in the Medical Library, on Saturday, November 10th, 1849. J. B. ESTLIN, F.L.S., F.R.C.S., President, in the Chair.

The President, on taking the chair, returned thanks for the honour they had done him by placing him in that position, and expressed his peculiar gratification at the kind and flattering manner in which his nomination had been received at the last meeting, of which he had not been aware until the present reading of the minutes.

He congratulated the members upon the formation and progress of their Society. Already had it been the means of attracting considerable attention to Bristol, by the Sub-Committee for investigating cholera, and of procuring for one of its members a Government appointment, alike honourable to himself and beneficial to the public. How far future experience would confirm the fact that the bodies described by Messrs. Brittan and Swayne, were confined to cholera, he would not pretend to say; but up to the present time he considered that the evidence in favour of the specific connection of these corpuscles with cholera, obtained by the careful examinations and experiments of these gentlemen, and supported by the opinions of such eminent microscopists as Dr. Carpenter and Mr. Quekett, were of greater value than the negative results obtained by Drs. Baly and Gull, and Mr. Busk. Mr. Estlin saw no reason why the discussions of the Society should be confined to medical and surgical disease. Collateral subjects, such at least as had an influence on the satisfactory and harmonious discharge of their arduous duties, might with propriety find expression at their meetings. The occasional consideration of medical ethics would not be unsuitable: indeed he foresaw that the time was not distant when the conduct of the ordinary practitioners of medicine and surgery towards the *extraordinary* professors of homœopathy must force itself on their notice. So diametrically opposed to each other were these two classes as to the medical literature they studied and the principles which guided them in the cure of the sick, that he should presume the homœopathists would be as anxious to hold no professional intercourse with the ordinary practitioner, as he would be, not to consult with them. Men of cultivated minds and of refined habits, might meet together in all the customary intercourse of good society, but in the sick chamber they could no more unite their service than those of the most opposite theological opinions could adopt, in religious worship, a formula expressive of the creed of one party only. He concluded by alluding to mesmerism, a subject which he had thought right to bring before his brethren in that place, (and not upon a very dissimilar occasion,) in 1845. At that time he took the liberty of advising members of the profession not to become “*investigators of mesmerism*” in the manner suggested to them, and with the parties who made the demand; and now that four years have passed away he could not withhold the expression of his gratification, that we so seldom saw the names of medical men in connection with mesmerism. He ridiculed the idea that the medical profession, were they ten times more numerous than they are, and as illiberal and bigoted as the magnetists accuse them of being, had it in their power to check the progress of mesmerism, were its pretensions to possessing a specific agency based on truth. And he contrasted with the stationary, if not retrograde, course of mesmerism, the discovery of chloroform. There was the example of a real agent affecting *specifically* and directly by the nervous system, and not through the medium of the imagination, all who are exposed to its influence. While now and then, in a few exceptional cases, and in peculiar constitutions, the mesmeriser is able to procure in long continued manipulations, such a degree of

nervous coma as will render a patient insensible to pain, chloroform, a discovery of yesterday, is exhibiting its unfeeling effects through the civilized world, millions probably having experienced its potency in destroying sensibility to pain. He did not, however, think it necessary to pursue this subject. He believed all present were agreed on the main point, that there was no such specific agent as that called mesmerism, emanating from the system of one person and acting upon that of another;—that no person could be subjected to the influence of the supposed agent without knowing that they were submitted to some process from which certain results were expected; and that the comparatively few persons who were at all affected by it, were ordinarily those of a peculiar temperament, and were acted upon through the medium of the imagination, or in consequence of the nervous system being fatigued by the long-continued operation of the mesmerisers. And sure he was it would be long before a *therapeutic* agent would be thought worthy of their attention, which, besides claiming the power of curing all diseases, professed to enable the patients to read without sight, to detect in others the latent cause of obscure disease, to discover lost property, and to hold converse with Sir J. Franklin!

Mr. J. G. Swayne then stated that he felt it due, both to this Society, which originated the investigations respecting cholera, and to his colleagues and himself who conducted them, that some reply should be made to certain statements contained in a report recently issued by a Sub-Committee of the College of Physicians. These statements were the result of observations made by three or four individuals, and he trusted that he should be able to show that these observations were not only incomplete in their details, but at variance with each other; and that he should also be able to give ocular proof of all he advanced. He then alluded to—

1. The experiments which were made upon the air, and which had been recorded in the Report; these were only seven in number, and their results were purely negative. Now, Mr. Brittan had, in at least an equal number of experiments, obtained positive results, which had been attested by several distinguished microscopists; such testimony as his, therefore, could not be set aside by a limited number of negative observations. The same may be said of the experiments upon water, with this additional remark, that many of them were performed long after the cholera had left the districts from which the water was taken. Mr. Swayne remarked, that if the experimenters had detected the “annular bodies” characteristic of cholera in the air and water of uninfected places, their evidence would then have had great weight; they had, however, entirely failed in doing this. He then adverted to the account given in the Report of the College of Physicians of the bodies found in cholera dejections, and exhibited an illustration in the Report in which those bodies were much misrepresented. The Report divided the bodies in question into three classes, according to their size and form. In the first class were the smaller bodies resembling rings. These Mr. Marshall had considered to be broken-down coils of vegetable spiral fibres. Mr. Swayne pointed out the extreme improbability of such bodies being present in large numbers, as he had frequently found them, in the

dejections of patients who had been on hospital diet for some time. He stated also that rings of this kind ought to be present in healthy evacuations, but this did not appear to be the case. He then noticed the opinion of Dr. Griffiths respecting the origin of some of these small bodies which the Report had placed, without any apparent reason, in another division. Dr. Griffiths was of opinion that they were calcareous particles from chalk mixture. Mr. Swayne said that he would presently show the members that chalk mixture contained but few of these particles, and that, therefore, this supposition would by no means account for the presence of “annular bodies” when they occurred in vast numbers, especially as he had found them in patients that he could prove had not taken a grain of chalk. Moreover, that the annular bodies could be at once distinguished from these particles by their not polarizing light. He then alluded to an idea which Mr. Busk had formed respecting the smaller “annular bodies,” viz., that they were altered blood-discs, which opinion, however, Mr. Busk had subsequently acknowledged to be erroneous. (*Medical Gazette*, November 2nd, p. 760.) The bodies in question, he observed, had been accounted for in three different ways by three observers, and their conflicting statements embodied in the Report. Mr. Swayne then proceeded to speak of the second class of bodies observed in the evacuations, viz., the large brown ovoid bodies which had been discovered solely by him, and which he was inclined to consider as the perfect form of cholera-cell; he had only met with them in a few specimens, but in these he was able distinctly to trace the transition from the perfect to the imperfect form. It was stated in the Report that Mr. Marshall had “clearly identified these with the rust, smut, and bunt of grain.” Now, from Mr. Marshall’s communication at the end of the Report, it did not appear that he had ever seen these bodies, as he makes no kind of allusion to them, but merely mentions that he had found specimens of the uredo in cholera evacuation, which he (Mr. Swayne) had done also. It was likewise stated in the Report, that Mr. Busk had “identified them with the uredo, segetum, or bunt.” To disprove this statement Mr. Swayne read a communication from Mr. Busk to the *Medical Gazette*, in which he stated that *these bodies were not the same as the uredo which he had found in bread*, for they were different in shape, and much larger, and that he only believed them to be of the same genus; Mr. Busk allowed, however, that he had not yet been able to find the species to which they belonged. Mr. Swayne then brought forward several facts to prove that these bodies were not uredos at all, viz.:—

1. That they were more than twelve times the size of the largest uredo from wheat.
2. That they were different in shape, being oval instead of round.
3. That they were different in structure, and presented evident signs of gemmation, (as Dr. Carpenter had recognised in a specimen sent to him.)
4. That they were dissolved by nitric acid, but that the uredo was scarcely affected by it.

Mr. Swayne then called attention to the plate in the Report, in which an uredo magnified 1200 diameters was compared to one of the cholera cells magnified only 250 diameters, and said that he would presently show these bodies side by side, so as to give the members an opportunity of

judging of their real sizes. He then went on to speak of the third class of bodies, viz., the irregular discoid, appearing like flattened cells, and pointed out to the great discrepancy of opinion expressed in the Report as to the origin of these bodies: for instance, Mr. Marshall thought they were fatty, and compared them to "rich cheese." Mr. Busk, however, thought that the smaller ones were altered starch grains, and the larger, the contents of bran cells; so that, perhaps, the conclusion arrived at in the Report, viz., "We are not yet able to account for the origin of those peculiar discs," was the best which could be expected under the circumstances. Mr. Swayne then said that these bodies could not be fat, as they were not acted upon at all by ether; besides, that they were greatly larger than the concretions from cheese. That they differed also from the contents of bran-cells, in being surrounded by a thick well-defined wall. He then noticed the total omission in the Report of any reference to the number of cases from which these observations were deduced, which was the less excusable because they were intended to set aside the results obtained by Mr. Brittan and himself from an examination of specimens from more than sixty cases. He also stated, with regard to the bodies represented in the Report as present in the dejections of other diseases, that they were too indefinite in form to be confounded with the cholera bodies, and that neither Mr. Brittan nor himself had yet been able to find them. He adverted lastly to the general tone of the report, which he thought was calculated rather to repress investigation than to elicit truth; and especially to the assumption of superior knowledge which prevailed throughout the report, as opposed to ignorance on the part of Mr. Brittan and himself; which charge he repelled by a reference to their respective reports of cases, in order to prove that spiral fibres, bran-cells, and starch, had always been recognised as such by both himself and Mr. Brittan.

Mr. J. G. Swayne illustrated his paper by exhibiting, under several microscopes, numerous specimens of perfect and imperfect cholera-cells, some of which he had lately obtained from Bridgewater, together with the uredo from bread and wheat, fatty bodies from cheese, calcareous particles from chalk, &c.

Dr. Bernard said that he could hardly consider the report as that of the College of Physicians, as it bore no evidence of having been adopted by the College; but that he looked upon it as the report of the Cholera Sub-Committee only. The College were not generally in the habit of sanctioning documents so hastily drawn up.

Mr. Godfrey said that he trusted Mr. Swayne's counter statement would be published, so as to obtain as wide a circulation amongst the profession as the report of the Sub-Committee of the College of Physicians.

Mr. Neild said that he thought some such course necessary, as he had lately returned from London, where he had seen several medical friends, who considered the matter quite settled now that it had been reported upon by the College of Physicians.

It was therefore unanimously requested that Mr. J. G. Swayne would give greater publicity to his communication.

A vote of thanks was then passed to the Editors of

the *Provincial Medical and Surgical Journal*, for the manner in which they had printed the report of the Bristol Sub-Committee, and especially for the accuracy and ability with which the illustrative cuts were executed.

RETROSPECTIVE ADDRESS,*

DELIVERED AT THE EIGHTH ANNIVERSARY

OF THE

READING PATHOLOGICAL SOCIETY,

AUGUST 8TH, 1849.

By WILLIAM B. YOUNG, Esq.

V.—DISEASES OF THE REPRODUCTIVE SYSTEM.

From the digestive we come to the reproductive system.

Diseased Ovary.—Mr. Walford presented the uterus and right ovary of a woman who, after delivery, appeared nearly as large as before. Mr. Walford saw her on the 9th day, when she seemed very feeble and thoroughly exsanguine, but made no complaint beyond being very weak and ill. The lochia were not excessive. On making an examination *per vaginam*, the finger entered the uterus, and when removed was covered with a mucous discharge of a bloody colour, and slightly offensive. She died on the 12th day after confinement.

Post-mortem twenty-four hours after death.—On opening the abdomen a bloody fluid escaped, and a large sac was observed covering the bowels, and partially emptied of its contents. It was easily separated from the walls of the abdomen. This proved to be the right ovary, with an elongated neck; its texture was soft, and it contained a fluid similar to that found in the abdomen, which had escaped from the sac by an opening with a thin ulcerative edge. Small intestines matted together by lymph. In taking a review of the case, Mr. Walford referred—1st. To its rarity. 2nd. Its adaptation for removal by operation. 3rd. The risk of inflammation being excited in the sac of an ovarian tumour by the process of parturition. 4th. The necessity of caution in manipulating, for fear of rupture. In the discussion which followed, Dr. Wells related a case which presented many points of resemblance to the one brought forward by Mr. Walford, and terminated in a similar manner. Mr. Harrinson thought there was evidence of inflammation in Dr. Wells's case, as proved by the pus in the fluid; for in simple cases, ruptured by violence, the fluid would be absorbed, as quoted by Sir A. P. Cooper. Dr. Wells contended that this would not be the case in multilocular cysts. Mr. Payne referred to the case of a lady in whom an ovarian tumour was supposed to have burst, peritonitis followed, and the fluid was absorbed.

Ovarian Dropsy.—Dr. Wells related two cases of ovarian dropsy:—1st. That of Mary Streaks, admitted

* Concluded from page 656.

into the Royal Berkshire Hospital, April 8th, 1849. The enlargement, which was very great, commenced in the side four months previously. Had been confined two years; and had not menstruated for four months. She suffered from acute pain over the abdomen, which was relieved by leeches. On the 2nd of May paracentesis abdominis was performed, and four quarts of a thick gelatinous fluid drawn off, with great relief; but the swelling soon returned, attended with severe pain. She was then brought under the influence of mercury, with some relief to the pain, but the swelling continued to increase in size. Paracentesis was again performed on the 24th of June, and ten quarts of a thickropy fluid drawn off. On the 26th, after suffering bearing down pains for two days, a foetus of about four months' growth was expelled. After this, prostration, with constant sickness, set in, and she died on the 6th of July. *Autopsy*.—A large ovarian tumour, consisting of many cysts, and proceeding from the left ovary, was found occupying the lower half of the abdomen, and universally adherent to the peritoneum. Intestines pushed up above the umbilicus; diaphragm much raised; liver nearly pushed into the right axilla; lungs and heart much compressed.

In his remarks, Dr. Wells said this was the second case which had occurred to him in the hospital, in which ovarian dropsy was complicated with pregnancy. In both cases the ovarian tumour and the pregnancy originated at the same time.

The second case was that of Susannah Clark, aged 52, admitted July 8th. Had suffered from the disease twelve years. The great distension of the abdomen produced such excessive dyspnoea, that paracentesis was performed, and about three gallons of a brown albuminous fluid were drawn off, emptying the principal cyst. This relieved the breathing, but in the night fever, with great restlessness, came on, sickness and prostration ensued, and she died exhausted on the 19th. *Autopsy*.—A large ovarian tumour filled the cavity of the abdomen, adherent to a great portion of the peritoneum, and consisting of a great number of cysts, having different contents. One of these cysts passed down in the cellular tissue between the vagina and rectum, pushing forward the posterior vaginal mucous membrane, and had presented itself externally in the shape of a large globular swelling between the legs. It had existed in this situation for some years, and had been supported by a bandage, the patient supposing it to be prolapsus uteri.

Fibrous Tumour of the Uterus.—Mr. Harrison presented a fibrous tumour of the uterus which he had removed from a woman aged 45, who died from disease of the heart, which was greatly dilated, following an attack of rheumatism. She suffered much from menorrhagia previous to his seeing her.

Post-mortem.—Uterus greatly enlarged, and seemed converted into one large fibrous tumour, the size of a foetal head, and occupying the hypogastric and umbilical regions. Fallopian tubes enlarged, so as to admit a probe, one of them terminating in a vesicular

enlargement of the ovary. The cavity of the uterus was prolonged up through the centre of the whole tumour.

Mr. Jeston presented a specimen of a single and double knot on the umbilical cord.

VI.—DISEASES OF THE URINARY SYSTEM.

Diseased Bladder.—Mr. Jeston presented a bladder, taken from a man who died with symptoms of stone. The discharge of pus ceased about three weeks before his death, but returned again more copiously.

On a *post-mortem* examination, the left ureter was found enlarged, as if a calculus had passed down through it. There was no ulceration of the bladder, but five or six small abscesses were found in the cortical part of both kidneys. Right ureter of the natural size. A calculus was found in the bladder, composed of a mulberry nucleus, coated with phosphates, and weighing fifty-six grains.

VII.—DISEASES OF THE SKIN.

Horny Excrescence.—Mr. J. Workman presented a large horny excrescence, which he had removed from the occiput of an old woman, aged 77. It was loosely attached to the skin, and hung on the shoulder. It had been growing two years. Its removal was followed by a smart hæmorrhage, but this was easily checked. It measured eleven inches in length, by three in circumference.

In his remarks, Mr. Workman referred to some cases mentioned by Bateman and others, all of which occurred in old women.

VIII.—SURGICAL DISEASES.

Fractured Spine.—Mr. Vines presented a portion of the spinal column, taken from Charles Mills, who met with an injury of the spine from a fall of earth, and became perfectly paraplegic. He continued in this state for several months, when he was seized with an attack of erysipelas, affecting more particularly the paralysed portions of the body, and under which he sunk.

On examination after death, the spine was found to have been fractured and displaced laterally about the eighth and ninth dorsal vertebræ. On a section being made, a deposit of new bone was found upon the fractured part, which must have pressed upon the cord.

Gun-shot Wounds.—Mr. Shorland read a very interesting case of gun-shot wound, with injury of the brain. The patient, a Man of War seaman, received the wound, which was situated on the right margin of the frontal bone, from a matchlock ball in the Chinese war, and lived nearly seventeen months afterwards. The ball was removed by the surgeon of the ship; it had penetrated both tables of the skull, so that the membranes could be seen through the opening. He complained of considerable pain in the occipital region opposite the wound; he had great fever, and the wound discharged freely, but there was neither stupor, paralysis, or loss

of memory. *Post-mortem*.—Membranes inflamed; vessels of surface of brain engorged; no effusion. An immense abscess was found leading down to the centre of the cerebrum, and opening into both ventricles; and resting on these a bullet was found, weighing between eight and ten drachms, and very irregular in shape, as if it had struck some hard body. The abscess contained about one pint of a thick chocolate-coloured matter, and very fetid. The fornix, optic thalami, and corpora striata, were completely destroyed by slow inflammation.

This case is interesting, as shewing the amount of injury and disease the brain will bear without much impairment of the functions.

Injury of the Radial Artery.—Mr. May related a case of injury to the radial artery, where it passes from the back to the palm of the hand. Compression was applied for a fortnight, but the hæmorrhage recurring, he was brought into the Royal Berkshire Hospital, when both ends of the divided artery were secured, but with great difficulty, owing to the disease of the cellular tissue.

This case is one of practical importance, as it shews the necessity of securing both ends of a divided artery as soon as possible after the receipt of the injury.

IX.—MIDWIFERY.

Lingering Labour with Hydrocephaloid Head.—Mr. Harrinson related a case of lingering labour with hydrocephaloid head, which lasted from Monday to Thursday, fifty-four hours. He was obliged to perform craniotomy. The fluid in the cranium amounted to between one and two pints. On measuring the head, after delivery, Mr. Harrinson found the circumference to be eighteen inches when not fully distended. A dried preparation of the foetal head is preserved in the Museum, which must have cost Mr. Harrinson much time and pains.

I have now completed, to the best of my ability, the history of our proceedings during the past year, but I must not close this Address without tendering our thanks and acknowledgments to our esteemed Secretary, Dr. Woodhouse, for the able manner in which he has taken down and arranged the minutes of our meetings, which renders the preparation of our Annual Address less arduous than it otherwise would be, and must occupy much of his valuable time.

It now only remains for me to thank you for your kind and patient attention, and to express a hope that our Society may continue to flourish, and that each year may furnish a report more worthy of your notice.

THE NATIONAL INSTITUTE.

THE CONFERENCE AT THE HANOVER-SQUARE ROOMS.

A numerous and highly influential meeting of the delegates from the various voluntary bodies associated for the purpose of reforming our Corporate Institutions,

was held on Tuesday, November 20, at the Hanover-square Rooms. Mr. Clifton, of Islington, Vice-President of the National Institute, was called to the chair, and explained to the meeting the course the College of Surgeons had pursued at the Conferences at the College of Physicians; he stated that the obstruction to a settlement of the medical question was the opposition offered by that College; and he especially reprobated the conduct of the College in disavowing the acts of its delegates. The chairman then adverted to the report that it was the intention of the Council to apply for an amendment of the Charter of 1843, upon the principle of admitting to the privileges of the Fellowship, under certain restrictions, the members of twenty years' standing, and stated that it was for the consideration of this meeting, whether such a concession would satisfy the members, and also what steps should be taken, with reference not only to the proposed amendment of the Charter of the College, but also with regard to the general question of Medical Reform. This meeting had been called together by the Institute in order to assimilate, by discussion, differences of opinion, and to induce unity of action among the various classes of Medical Reformers, and he was gratified to see so large a number of gentlemen from all parts of the country assembled on this occasion.

Letters were read by Mr. Ross, from Dr. Hastings, President of the Provincial Association; Dr. Kidd, Regius Professor of Physic of Oxford; Mr. Peplow Cartwright, Secretary of the Shropshire Association; and Mr. Bowring, the Secretary of the Manchester Committee of Surgeons, and from many other gentlemen. Mr. Bottomley, the Chairman of the Associated Surgeons, was present, as were also several graduates of the Scotch Colleges, and Mr. Bowling, of Hammer-smith; Mr. Propert; Mr. Meriman, of Kensington; Mr. Bird; Mr. Farnham Flower, of Chilcompton; Mr. Donald Dalrymple, of Norwich; Mr. Ansell; Mr. Gibson, of Ulverstone; Dr. Hodgkin, the Chairman of the Committee of Poor-Law Medical Officers; Mr. Thomas Martin, of Reigate; Dr. Webster, of Dulwich, and many other gentlemen whose names we could not ascertain.

A most interesting discussion ensued upon the important question of an amendment of the Charter of the College of Surgeons, and it was ultimately agreed, with the unanimous assent of the assembled delegates—

“That a Deputation from the Conference be appointed for the purpose of ascertaining the extent of the concessions proposed to be granted by the Council of the College of Surgeons, in the amendment of the Charter of 1843; also, to submit to the Council the substance of the memoranda as now read by Mr. Bottomley, on the subject of a reform of the constitution of the College of Surgeons, and such other points in relation thereto as may be considered expedient, and that they report the result to an adjourned meeting of the Conference.”

The following gentlemen were appointed members of the Deputation:—

Nathaniel Clifton, Esq.; John Propert, Esq.; George Bottomley, Esq.; Croydon; Richard Southee, Esq., Cambridge; Henry Ansell, Esq.; D. Dalrymple, Esq., Norwich; James Bird, Esq.; F. Flower, Esq.,

Chilcompton; Peploe Cartwright, Esq., Oswestry; Dr. Webster, Dulwich; Thomas Martin, Esq., Reigate; Peter Hood, Esq.; John Bowling, Esq., Hammersmith; and Thomas H. Smith, Esq., St. Mary's Cray.

It was also resolved—

“That, should the answer of the Council of the College of Surgeons be unfavourable, the same Deputation do wait on Sir George Grey, to urge upon the Government the importance of an immediate incorporation of the General Practitioners into an independent College, and the passing of an Act of Parliament to settle the great question of Medical Reform.”

The meeting then adjourned to another day, when they would receive the Report of the Deputation.

Foreign Department.

On the Treatment of Tubercular Meningitis.

A comprehensive essay on this fatal disease has been contributed by Dr. Hahn, and published in the *Archives Générales*, which, as it offers some useful practical hints on the treatment of the disease more especially in its latter stages, is worthy of passing notice. The author first speaks of meningitis occurring suddenly, without being preceded by symptoms indicative of previous tuberculous diathesis. In these cases he advises bleeding and calomel, but relies chiefly on the latter, guarding at the same time against unnecessary salivation, the severity of which may destroy life after the disease for which the mercury was given has subsided. He speaks also in strong terms of the cold affusion, by which he states that he has several times succeeded in rousing the child after the supervention of complete coma. Another measure of great value in the same emergency, is friction of the scalp with tartar emetic ointment, repeated every two hours, until pustulation is established. This is a severe measure, and occasionally induces gangrene, but there are few parents who would not readily see their infant snatched from impending death, though at the risk of subsequent intense suffering. It is, however, possible by management, to avoid such excessive inflammation. Of the success of this method the author speaks in high terms, having by it saved fourteen cases in apparently a hopeless state of coma.

In the second class of cases noticed in this memoir, viz., those in which the cerebral symptoms are preceded by others, denoting a general tubercular cachexia, a modified plan of treatment is advised, blood-letting, except locally and sparingly, is contraindicated; neither is it safe to push calomel to the same extent. The author in this, as in the preceding case, relies much on counter-irritation of the scalp, and advises the same means of fulfilling this indication.

The memoir terminates by the recital of several cases in which a cure was obtained by the tartar emetic friction of the scalp, under the most unpromising circumstances. Of these cases it will suffice to cite one as an example.

A fine boy of nine months old, was suddenly attacked with convulsions. He recovered from these, and cut his first teeth shortly afterwards; he was soon observed to fall away, to become listless, and to lose his appetite, without any condition of tongue which could indicate intestinal derangement. His bowels became constipated, his pulse irregular, and he began to vomit and to become torpid. Fever was soon added to his symptoms, and it was evident that he was the subject of meningitis. Leeches were applied, and calomel given, but in spite of treatment he lapsed into complete coma. As soon as the latter symptom became distinct, tartar emetic ointment was rubbed into the scalp every four hours over a space the size of a crown piece. Free suppuration ensued, and signs of amelioration were speedily witnessed. The child became gradually more sensible, his appetite returned, and in a fortnight all traces of his malady had vanished.

Cerebro Spinal Typhus.

This title is applied by M. Boudin (*Archiv. Gen.*, Août, 1849,) to the disease which has recently proved so fatal in several parts of France and Switzerland, and which has been hitherto described as *cerebro spinal meningitis*. The object of M. Boudin's memoir is, to deny this view of its pathology, and to demonstrate that it is a variety of typhus with unusual nervous complication. The author adduces the following general propositions:—

1. That the disease is not cerebro spinal meningitis.
2. That it is not inflammatory.
3. That it is not epidemic.
4. That it is contagious.
5. That it is a typhus fever.

These propositions are founded on these considerations:—1. That there are no constant *post-mortem* appearances. 2. That so far from an antiphlogistic regimen being called for, a directly stimulant treatment is frequently required. 3. That the disease has generally appeared as a consequence of the arrival of troops from an infected garrison, and in its subsequent progress has obeyed the laws which regulate the spread of an infectious malady.

ABSTRACT OF THE PROCEEDINGS OF THE FRENCH ACADEMIES.

ACADEMIE DE MEDECINE.

The Academy has received several communications on *cholera*, but they are for the most part perfectly uninteresting. The only one which contains any novelty is that of MM. Lachaise and Dufay, who has dwelt upon the simultaneous appearance of cholera and miliary sweat. The conclusion arrived at upon the subject is, that the miliary sweat appearing simultaneously with cholera, may be considered as an abortive form of the disease; and that the appearance of the former may be taken as an evidence that the choleraic symptoms will be mild.

M. Boudin read a communication on the *therapeutic*

value of arsenic in malarial fevers. His report is most favourable, announcing that he has never had recourse to quinine during five years. In an economical point of view the superiority of the preparations of arsenic are incontestable.

M. Velpeau mentioned a curious circumstance of a foreign body—an *eau de cologne* bottle—becoming impacted in the rectum. It had passed so high up that its extremity could be felt in the left inguinal region, where it formed a tumour. It was extracted with some difficulty.

M. Monneret, in an essay entitled “Researches on the Diseases of the Aortic Valves,” denied the possibility of distinguishing between insufficiency and obstruction of the cardiac valves, maintaining that all that we could assure ourselves of was, that the aortic and ventricular valves were diseased. The same opinion which does away with the regurgitant bruit is also entertained by Professor Forget.

ACADEMIE DES SCIENCES.

The following are the most interesting of the memoirs presented to this Academy since our last account:—

M. Marchal (de Calvi) “On the Augmentation of the Fibrin of the Blood by Heat.” The Author maintains:—1. That the elevations of temperature increases the quantity of fibrin in the blood. 2. That the excess of this element in inflammation is partly due to the excess of temperature. 3. That fibrin is nothing more than albumen coagulated by the influence of heat.

M. Du Courcet gave a description of a race of negroes in central Africa, which he considers to be intermediate between the human species and the monkey. The chief peculiarity consists in the prolongation of the os coccygis, in both sexes, into a tail of three or four inches long; in the organization of the cranium; their large mouth, pendulous ears, and long arms. They closely resemble the higher classes of simiæ, but their possession of language incontrovertibly settles their human origin.

M. Velpeau narrated the “Case of an Enormous Umbilical Hernia in an Infant, treated by the *‘methode sous cutanée.’*” This consists in puncturing the sac with a trocar after carefully reducing its contents, and scratching the neck of the sac, so as to induce inflammation. In the case related it was successful, but in the adult it appears to have failed.

of the face, were observed to be affected, some muscles being much more influenced than others. Some of the movements in respect of form were not unlike those of volition. In one of these cases the motions ensued two minutes after death; in the other, a quarter of an hour. In both the muscles of the lower extremities were first affected, and the movements appeared successively in those of other parts. Two cases, very well marked, accurately observed, and presenting very similar features to the foregoing, and which had occurred long ago in India, were referred to. The author described those more local and transient forms of the affection which were more commonly observed; the movements might be confined to the legs, the chest, the face, to a single muscle, or even to certain fibres of it. A case of cholera was on record in which paralytic muscles had been affected by spasms. These *post-mortem* contractions had been stated, by an observer, to admit of excitement and aggravation by “pricking.” The writer had endeavoured, in one instance well-calculated for experiment, to repeat the observation, but had been unsuccessful. He had used, also, water of the heat of 150° , and of a yet higher temperature, in order to discover if the motions could be either induced or affected by it; no definite result could be obtained. Probably these motions, which had as remarkably narrow a sphere of action in some cases as they had a wide one in others, would have been much more frequently met with had they been oftener sought for. Attention was directed to the terror which they had caused to ignorant persons and persons not ignorant; they had given rise to unfounded notions of persons being buried whilst yet alive. They had been seen by friends, to their extreme amazement, as they were watching the bodies of the deceased relatives; and it was necessary, with the view of preventing groundless alarm and false conclusions, that all persons who might come in contact with the corpses of those who had perished from cholera should be informed that it was by no means extraordinary for such actions to be witnessed after death in this disease. The author had no explanation to offer of the cause or causes of these curious phenomena. For the present, they must be viewed as facts. Groundless speculations would only surround them with unnecessary mystery. He concluded by proposing a careful inquiry into all the circumstances under which they occurred; and some points were specified which it would be interesting to consider. Amongst other things, it was important to note their duration and the most protracted interval which might elapse between dissolution and their commencement.

[This automatic movement of defunct cholera patients was one of the remarkable features of the disease, first noticed by us in 1832. The first instance which occurred in the wards of the Redcross Street Hospital, in the borough, excited no little commotion, the bed-clothes being completely removed by the movement of one arm. The phenomenon subsequently became so common, as to cease to excite attention. We noticed at the same period the return of the natural temperature of the living body, as an universal fact, and in some

General Retrospect.

MEDICINE.

On the Muscular Contractions which occasionally happen after Death from Cholera.

Mr. Barlow has noticed two striking cases in which these movements occurred after dissolution, and lasted for a very considerable time. The muscles of the arms, chest, and legs, and, in one of these examples, those

few instances the cessation of life was so imperceptible, that we could only assure ourselves that the patient was dead by feeling the return of warmth to the previously ice-cold surface.—*Ed. P. J.*]

SURGERY.

An Operation to supersede Castration.

Mr. Taylor, of Alfreton, Derbyshire, suggests that division of the vas deferens would suffice to prevent desire, and that castration might be dispensed with. He believes that desire is caused by the irritation of the vesiculæ seminales by semen, and that if the arrival of the semen to those reservoirs be prevented, desire will cease. His own words are:—Studying the anatomy of the testicle and spermatic cord, it struck me that an operation might be performed, which would obviate the undesirable effects of the removal of so important an organ, and which would still destroy desire without affecting the seminal secretion, and by this means avoid depriving the animal of his masculine characteristics, which, unfortunately, is done by the present operation. I find that when sows, (in this neighbourhood,) are what is popularly termed cut, the operation consists, not in the removal of the ovaries, but in simply dividing the Fallopian tubes, thus preventing sexual heat, which would otherwise come on in certain months of the year, and destroying, not only all desire, but all capability of procreation, without unsexing the animal. Now, I humbly opine, that a similar division of the vas deferens in the male would, on the same principle, deprive the animal of desire; and as the testicle would be still effectually nourished and retained *in situ*, it is fair to suppose that the semen would be secreted as before, and be taken up by the absorbents into the blood, by this means retaining all the masculine characteristics of the animal; but it may be averred by some, that this operation would not deprive the patient of sexual inclination. Allowing, as physiologists do, that desire is caused by the irritation of the semen in the vesiculæ seminales, I believe that this operation would be quite as effectual as the total removal of the testicle; as it is a well acknowledged fact amongst horse dealers and others, that a horse old enough for procreation will, after castration, have desire and power to impregnate one female with the semen which then fills the vesiculæ seminales, though of course not more than one. This, I think, is a full proof that desire is created by the irritation of the semen in the vesiculæ seminales, and that division of the vas deferens would be quite as effectual, far less cruel, and attended with much better effects, than the ordinary removal of the testicle. Acting under this impression, I placed a dog under the influence of chloroform, dissected the vas, removing an interspace of about three quarters of an inch; the animal recovered perfectly, the wounds healed by the first intention, and I took the first occasion that occurred to place him with a bitch in use, when his conduct plainly showed that all tendency to perpetuate his species was gone.—*Lancet*, Oct. 27.

[We cannot agree with the author in the view he

takes of the origin of sexual desire; the fact of the castrated horse being capable of one copulation may be otherwise explained. We believe the instinct to be partly psychical and partly physical, and that a due nervous correlation between the cerebellum and testicles are necessary for its manifestation. The question, however, admits of a very ready solution by experiment.—*Ed. P. J.*]

Extraction of Foreign Bodies from the Cavity of the Mouth and Gullet.

By M. DIEFFENBACH.

[The subjoined extracts are taken from some valuable papers, published in the *Medical Times*, by Dr. Bushnan.]

Foreign bodies become fixed in the mouth only after having penetrated the mucous membrane, and are easily removed. When situated in the fauces or gullet, they create intolerable irritation, and eventually inflammation, if of a sharp or acrid description. Their immediate removal is therefore indispensable. Where there is a prospect of this being accomplished without operative interference, an endeavour may be made to provoke vomiting, by thrusting down the end of a feather dipped in oil; if the patient has the power of swallowing, an emetic may be exhibited in the mouth, or under urgent circumstances, injected into a vein. This treatment can apply only to small substances, for, if large and firmly impacted, the gullet may be ruptured. In all examinations with instruments, the tongue ought to be depressed to the utmost.

The body in question must either be withdrawn, or hurried into the stomach. The first course is the best, the last often dangerous. Venesection is occasionally indicated. Should everything fail, œsophagotomy is the sole alternative,

The substances which lodge in the fauces are generally small and pointed, such as fish bones and needles, most frequently the former. The patient being seated, is directed to gape and make a deep inspiration, whereby the velum is elevated, and the surgeon enabled to detect and extract the bone with forceps. A lady, after eating some cake, suddenly shrieked with pain. I could perceive nothing about the neck, but on carrying my forefinger to the back of the tongue, brought away a long thick bristle, which lay archwise across.

Foreign bodies observe in their transit certain *stations* at which they halt; thus, in the pharynx, behind the thyroid and cricoid cartilages, in the beginning of the gullet, or at its lower end, close to the diaphragm or cardia. They seldom stop at the middle of the gullet. If very large, they may cause suffocation; thus a large piece of meat, or a hard-boiled egg, a pear, a chesnut, have each proved fatal. Guattani witnessed the most frightful death ensue from a chesnut; the part of the gullet at which it stuck was gangrenous. Spiritus saw the same result follow the swallowing of a five-franc piece, which perforated the gullet above the cardiac orifice. Needles, inadvertently swallowed, pierce sometimes the gullet or stomach, advance by the aid of sup-

puration or otherwise towards the surface, and either escape spontaneously or through incision. Lyson observed a case where three needles that went in at the mouth came out at the shoulder; I have known one issue at the arm.

The procedure must be modified according to the nature of the substance. None but a bungler would attempt to disgorge a piece of meat sticking at the cardiac opening, or urge on a fragment of glass from the gullet into the stomach. External pressure will suffice for potatoes or plums when stuck in the throat.

For the withdrawal of needles, fish-bones, and the like, there is no better implement than a large goose or swan quill-feather, with the barbed portion ruffled, imbued with oil. The patient sits with his head leaning upon the breast of an assistant, while the surgeon lowers the tongue, then introduces the feather, with its concave side downwards, into the throat, turns it rapidly round, and draws it out. The popular practice of swallowing a crust of bread is sometimes availing, but may also increase the peril when arrested above the bone. A sudden slap on the back is by no means a bad plan, when the substance is large and obtuse. It is preferable to that of setting the patient on his head, as was done in the instance of Mr. Brunel, to promote the expulsion of the half-sovereign piece.

The principal instruments employed for the present purpose are of the description of forceps. Dupuytren advises, as a preliminary step, the introduction of a gum-elastic tube, surmounted with a silver ball, in order to ascertain the position of the foreign body. This, however, is superfluous, and will tend, moreover, to augment irritation. Cooper recommends the forceps of Weiss. The so-called leaden hammer of earlier writers consisted of a lead ball attached to a string, which was let down the throat, and pulled up again. Mesnier's lead hammer was of an olive shape; Petit's was equipped with a wire instead of a string. Petit used, besides, a metal noose fastened to a whalebone stem; Fabricius Hildanus a many-holed silver tube, provided below with a sponge. The double ring of Graefe, attached to the end of a rod of whalebone with a steel spring, is very convenient for taking pieces of money out of the throat. The customary instrument, termed *répoussoir*, or probang, namely, a bit of sponge as big as a walnut, stuck to the end of a whalebone rod, is generally useful either for entangling fish-bones and the like, or propelling large round substances. My own procedure is as follows: if the body be small and sharp, I employ the oiled feather as above described. An oiled wax taper, passed down to the cardiac orifice, has proved serviceable; for, as soon as withdrawn, the body has been rejected. If the body be large, as a portion of flesh-meat adherent to a fragment of bone, I use a lithotrite with an imperforate scoop, and rather straight. The instrument is introduced with the blades closed, until it arrives at its destination, when these are to be separated sufficiently to grasp the substance, and, after a few gentle turns, withdrawn.

When there is impending suffocation from the presence of very large bodies impacted in the throat, some

enjoin tracheotomy before resorting to opening the œsophagus. I have never been compelled to this extreme measure. The most difficult thing to deal with are sets of false teeth when swallowed. I once relieved an old lady in this predicament by means of my fingers. On several occasions I have removed, with curved polypus-forceps, from three to four teeth attached to a gold plate, and which got accidentally into the throat; once, by the aid of an emetic, as a last resort, a set of four teeth very deeply located.

In all these operations the patient is to be in a sitting posture, the head properly supported, the mouth rinsed with tepid water, tepid water mixed with white of egg taken as a drink, and the instrument smeared with white of egg rather than with oil.

Extraction of Foreign Bodies from the Vagina.

By M. DIEFFENBACH.

For this purpose the surgeon may commonly use his fingers or a polypus-forceps; but if the foreign body be bulky and wedged in, the bullet or lithotomy-forceps and broad hooks. The patient being seated upon the edge of a table, facing the light, with the thighs held widely apart by two assistants, the surgeon squirts a little oil into the vagina, examines the nature of the body with the fingers and speculum, then passes up the forceps previously oiled, gradually opens them, insinuating one blade behind the body, and finally withdraws it in the line of the pelvic axis. This is nowise difficult, when the body is not very irregular in shape, and the parts are not inflamed or swollen. Where, on the contrary, the vagina is contracted and deprived of elasticity through inflammation and puriform secretion, and the substance large, it must be broken up into fragments and taken away piecemeal.

After its removal the vagina ought to be well syringed, and the patient put into a warm bath. Mucilaginous decoctions may be subsequently injected, and the parts fomented with infusion of chamomile and Goulard lotion.

Foreign bodies in this situation are of every variety. If allowed to remain long, they determine inflammation, suppuration, and rupture of the vagina, either into the rectum or the bladder. Thus communication with these cavities, and effusion of their contents into the vagina, is the obvious result. Foreign bodies, if sharp and angular, occasion now and then dangerous lesions. I once had to remove from a young lady a number of different-sized fragments of a porcelain urinal which had broken under her. The labia were severely wounded, and the vagina completely filled with the sheard. The hæmorrhage was so excessive as to have caused fainting. I extracted the whole by means of polypus-forceps, and inserted a few fine sutures. The wounds healed promptly. Large, incrustated, and firmly-adherent sponges were removed by me with lithotomy-forceps, as also a variety of full-sized wooden pessaries, all in like manner covered with a crust. Some of these I was obliged to break, using several forceps, with the aid of assistants, or else cut them in half with Liston's bone-

scissors. Morand withdrew from a lady a silver pessary through the openings in which bridles had shot across, and held it fast. Dupuytren extracted from a nymphomaniac a pomatum pot; on another occasion an old ring-pessary, which was wedged in, and caused most urgent symptoms. A girl introduced the cone of a pine into the vagina. The sharp imbricated scales got lodged into the mucous membrane, and were picked out one by one after the cone had been cut in pieces. The vagina was excessively turgid.—*Medical Times*.

ALLEGED DEATH FROM THE INHALATION OF CHLOROFORM.

On the 25th of October last, a man named Robert Mitchell, aged 43, residing in Hall's Court, Hunslet Lane, whilst labouring under a severe attack of *delirium tremens*, (brought on by excessive drinking,) was attended by Mr. Joseph Teale, surgeon, a respectable and established practitioner in Leeds, who administered chloroform to him for the cure of the disease, soon after which he expired. The deceased was a corpulent man, and had lately been in the employ of Messrs. Hollins, as driver of an omnibus. The disease had existed for a few days, and on account of its rapid increase under the treatment of opium—generally considered the sheet-anchor in the treatment of this frightful complaint—chloroform as a last resort was administered. On the Thursday evening the patient exhibited great muscular power, and in the anxiety for the preservation of his own property, of which he supposed a neighbour was robbing him, he ran out of the house into Goodman's Court, in the same neighbourhood, where he declared the delinquent resided. Two police officers persuaded him to go to the Court House and lay a charge, and he at once consented. He was brought back in a coach to his own house again, in company with Mr. Teale, and on the patient being got to bed, chloroform was administered. This would be about half-past eight o'clock, and the poor fellow expired in about an hour and a half afterwards, having experienced at intervals the most excruciating torments.

An inquest was held before Mr. Blackburn and a respectable jury, at the Court House, at a quarter-past ten o'clock on Tuesday morning.

The first witness called was Hannah Cairns, sister to the deceased, and wife of Robert Cairns, stone-mason, Woodhouse. She said—I was at my brother's house on the night in question; he was labouring under great agitation of mind, and went into Goodman's Court, with a shovel in his hand, and in an excited state said some one in that yard had taken a box from him. He said they were robbing his house. Two policemen were fetched to him, and he subsequently went to the Court House, and I followed him there. He perspired very much, and complained of headache. It would be about eight o'clock when we went to the Court House, where we should stay about a quarter of an hour. When we got out of the coach he said, "All is right, Mr. Teale." Mr. Joseph Teale was sent for to the Court House, and he came immediately. He accompanied him home, and persuaded him to go to bed. The deceased undressed himself and got

into bed himself. Mr. Teale called for a chamber towel, which he doubled into four folds. He then poured something on the cloth, and my brother said—"I think it will take the foul air away from the room." It made a great fume. Mr. Teale then let him smell at the cloth, and deceased put it away with his hand, saying, "It takes hold of my lungs." Mr. Teale said, "I want it to take hold of your lungs." He took two or three strong smells at it. After two or three minutes had elapsed he was in the most violent convulsions, with his arms stretched out. Mr. Teale tied down his arms with jack towels. I left the room after they were put on, and on returning in about ten minutes afterwards, deceased had the towel on his face, and was struggling. Before I left the room he said that the sensation produced "was worse than being in h—l." Two policemen and some other men, by Mr. Teale's request, came up stairs to hold him down; and on my going up stairs the second time, I saw he had the handcuffs on. His legs were also tied. Mr. Teale did not say what the stuff was composed of. No brandy or anything else was given him whilst I was in the room. On going the second time into the room, I did not stay more than two minutes. It would be about nine o'clock when Mr. Teale left the house; and in about half an hour afterwards, on going up stairs, I found my brother quiet. He gave two or three deep moans. The handcuffs were still on. I said to Ward, (a man in the room,) "I think he is dying;" but he said he thought that he was not, that it was merely sickness. He died in five minutes afterwards. Mr. Teale had then been gone three-quarters of an hour. No other medical man was called in. Before inhaling this stuff my brother appeared perfectly calm. The handcuffs were not required until he had inhaled this liquid. He was quite sensible at the Court House, although he seemed rather flurried. The heat of the fever had subsided to all appearances, and on inhaling this liquid he relapsed into convulsions. In 1848 my brother had a similar attack. Mr. Teale and Mr. Ruddock attended him, and there was no liquid administered on that occasion. The complaint had been coming on for a long time.

Mr. Joseph Teale said, I am a surgeon in Leeds. I first saw the deceased on the 20th of October. He was labouring under the influence of liquor, and, at the time, had symptoms of *delirium tremens*. I prescribed for him; and he called again on the Monday morning; and although the symptoms continued to exist, he was not any worse. Medicine was again given to him. The day following I saw him at his own house. He was in bed. He was worse, and had fancies peculiar to this disease. He talked incoherently. I visited him again the following morning, and found him relapsing into confirmed *delirium tremens*; and although I do not then consider he required any restraint, I desired them to watch him. I saw him also on Thursday morning. He was, in some respects, worse; there was less power in the pulse. He was perfectly manageable. I next saw him at the Court House at a quarter to eight o'clock. He was very much excited and exhausted. On arriving at his own house, I with great persuasion, got him into bed. The pulse I found so extremely weak, that I feared sinking was taking place. This feebleness had been brought on by his previous excitement. On finding that the man was sinking

rapidly under the ordinary treatment, and that blistering the back of the neck, and administering opium and morphia had failed, I put him under the influence of chloroform; this course being grounded on conversations I had previously held with medical friends. I dared not have carried the opium further. There are various degrees of strength in chloroform from different manufacturers. The chloroform administered was from Dublin. I poured a teaspoonful on the towel, which I wrapped into four folds, and then gradually applied it to the nose and mouth, as he became accustomed to breathing it. This application would continue two or three minutes; and the immediate effect was to tranquillise. The pulse gradually improved by its influence; but this state did not continue more than four or five minutes. It then abated a little, and the patient became again more violent, and on this violence increasing the pulse decreased in power. Spasmodic twitching of the face and arms took place, which is very common after inhaling chloroform. I applied the chloroform a second time in the same quantity and with similar results. I waited to see the effect of the second dose; and I afterwards gave him a little brandy-and-water. It was during his great excitement, between the first and second application, that I ordered the handcuffs to be put on. It was impossible to hold the man from the violence he manifested: towels would not keep him sufficiently under control. I don't think I applied chloroform a third time. In the second application it might have been given at two short intervals. I watched his pulse particularly. I should be about three quarters of an hour with the deceased. He was quieter when I left him and the pulse was stronger. I did not then apprehend immediate death, taking place, but in *delirium tremens* patients will often die suddenly from syncope. I thought he was a person who would get through it. I told a man to watch him closely, and promised to see him again in two hours. In the meantime he died; and I met the messenger, announcing his death, as I was coming again. It is usual on such occasions to administer chloroform; it has been given by several medical men in this town, as well as by many other practitioners of high standing. It is only applied in particular cases, and in this instance I should not have thought I had done my duty if it had not been adopted. In cases where there may be a tendency to apoplexy, and where you cannot carry opium or morphia any further, chloroform is resorted to, as the two former induces apoplexy.

By a Juror.—I have seen chloroform applied locally in experiments, but not on the human subject.

Mr. Samuel Smith said—I have been for thirty years Senior Surgeon to the Leeds Infirmary. Last evening, in conjunction with Mr. Price, examined the body of the deceased. We first noticed that the face and the head were enormously swollen and black. There were vesication from abrasions of the cuticle on the chest, arms, and lower extremities, and considerable blackness in several parts, indicating that decomposition was going on. We divided the integuments over the head, and separated the scalp from the skull, in doing which a large quantity of dark bloody serum was discharged. The skull-cap was removed, and we then noticed that

the brain was much decomposed, pulpy, and brown, particularly towards the base. There were no unnatural appearances in the lateral ventricles of the brain. The chest was then opened, and we found the lungs dark coloured, congested, and collapsed. The superior lobe of the right lung had an old adhesion to the pleura; and in the left lung there was a mere adhesion. We afterwards opened the pericardium, or membranous bag that surrounds the heart. The heart was small for a man of the deceased's bulk, and it was pale and empty. The cavity of the heart, and the valves of the great vessels, were in a natural state. The mucous membrane of the trachea and larynx, or upper part of the windpipe, was of a reddish brown, and highly congested; this we traced down to the division of each side of the chest. The contents of the abdomen were examined. We found the liver of a natural size, and in a healthy condition, with the gall-bladder full of bile. The stomach was quite empty, and there was no unnatural appearance. The remaining abdominal viscera appeared to be in a healthy state, and loaded with fat. I could not give a decided opinion as to the cause of death, for the body, being advanced in decomposition, it was quite impossible for us to make so minute an anatomical examination as we might have done two or three days after death. If we combined the appearances with the evidence, a pretty accurate opinion might be arrived at. There was nothing to account for death in the brain; and there were no effusions of blood, or any ruptures or laceration existing. The brain was very pulpy and brown, and it soon decays after this disease. The appearance of the lungs and heart was attributable to a combination of *delirium tremens* and chloroform. The heart, however, might be expected to be found in such a state, the patient dying in syncope from *delirium tremens*; but I should not have expected to have found the lungs in that state, or the mucous membrane of the trachea. It was very probable that the condition of the lungs and the mucous membrane of the trachea might have been caused by the inhalation of chloroform; and this, coupled with the state of the heart, which was empty, may account for death. After hearing the evidence, I think it was prudent to administer chloroform in the way in which Mr. Teale had described. I should have done so in a similar case, after failing by the ordinary treatment of opium. I should, as a general proposition, apply chloroform; it is the recommended practice—not the established practice. If Mr. Teale had failed to relieve the patient by the ordinary treatment, he was justified in administering chloroform in this instance; and it would have been approved of by the heads of the faculty in this country. The patient generally resists its application at first, as it sometimes produces a choking sensation, in consequence of which we withdraw it from the mouth, and allow the patient to breathe the atmospheric air, thus preparing him for its renewal. The immediate effect is tranquillisation; and it is not unusual for slight convulsions to occur. Sometimes, however, they are violent, and insensibility follows. Patients are generally recovered from these convulsions in five or ten minutes, unless small doses are renewed. The mucous membrane of the trachea and larynx, and the heart, might have been empty, if he had died from

fainting during *delirium tremens*. Chloroform has been used successfully in this town, and I am not aware that in the present case it is suspected that death ensued by the inhalation of chloroform. Looking at the whole circumstances of the case, I should say that the man had died under a combination of *delirium tremens* and the fumes of chloroform. I should not like to say that he had died from chloroform, for I have great doubts whether he would have lived if he had not inhaled the chloroform. He might have died if he had not had the chloroform administered. From the evidence he only appears to have been under its influence for ten minutes, whilst I have seen patients bear it for an hour, during a long and tedious operation. If I was asked to report the nature of the deceased's death, I should say *delirium tremens*.

By a Juror.—I should not have hesitated to employ chloroform; but I shall be more cautious after this case.

Mr. Teale said the deceased had been labouring under bronchitis for several days.

Mr. Smith.—Well, that will account for the redness of the mucous membrane, but not for the appearance of the lungs.

Mr. Price said that if he had not heard the evidence, but had formed his opinion merely from dissection, he should have said that by the application of some powerful means vital action had been suspended for a short time. The appearances existing were the same as are to be found in fatal cases resulting from chloroform given in too large a quantity. But he was very much inclined to the opinion of Mr. Smith as to the existence of a combination of causes. He could not solely attribute the appearances to *delirium tremens*. In the case of a person labouring under *delirium tremens* there is a tendency to syncope, and, therefore, too large a dose would prove fatal, whilst the same quantity of chloroform administered to a person in health would not have the same effect. Chloroform ought to be used with very great caution. He never had used chloroform, and should not, in *delirium tremens*, without consultation. He thought death was produced by *delirium tremens* and chloroform, but he should, in giving the cause of death to the registrar, say, "*delirium tremens*," for it was the primary disease, and all that could be said was that if chloroform had not been administered he might have lived a few hours longer. Under the excitement the deceased was in at the time, he was not surprised at his dying suddenly under the influence of chloroform. The administration of chloroform in these cases is a proposed—not an adopted practice.

By a Juror.—A teaspoonful of chloroform was an usual dose.

The jury felt desirous of having additional medical testimony, and other medical gentlemen being in the room at the time of the inquest, it was proposed that one should be called to give his opinion.

The coroner objected on the ground that it would be putting the borough to further expense; and he did not think additional medical evidence required.

Mr. Teale said that Mr. Samuel Hey had had a similar case under treatment, and had adopted the same remedies; and, as it would better satisfy the jury and himself were he to be called, he should have no objection to bear the expense.

Mr. Samuel Hey, surgeon, said he had been present during almost the whole of this examination; and after hearing the evidence of the practice adopted, said that he should have pursued a similar course. I have, he added, given chloroform in as extreme a case of *delirium tremens* as his, and with success. I used more than Mr. Teale—two spoonfuls at one time. In cases of convulsion, it is successful; and from the evidence, I should undoubtedly have administered chloroform. It is given to the patient as the last chance.

By a Juror.—The case mentioned he had under treatment many days, and opium and other things had been given as far as prudent. The patient was extremely violent, and had a kind of epileptic fit. After chloroform had been given, the patient slept for two hours; and upon waking he had a dose of brandy-and-water given, and fell asleep, and continued in that state for twenty-four hours, when he awoke perfectly recovered. Mr. Teale also saw this person. It was justifiable to use chloroform in this case, even supposing the patient had died under it, for he could not have lived a couple of hours longer had it not been used.

The Coroner said—the witnesses, other than medical men, were not capable of giving an opinion as to the real effects of chloroform. This inquiry did not impute blame to any gentleman; for Mr. Teale evidently administered the chloroform with the best intention. He had applied the usual remedies; they failed; and he, as a last resort, gave chloroform; and if he erred in judgment, they could not take cognisance of such mistake. The case rested on the *post-mortem* examination. Chloroform was something new in science, and, therefore, was not an adopted practice. He concluded by saying, that in his opinion no blame attached to Mr. Teale, and the only verdict which they could come to was, that the man had died of *delirium tremens*.

The verdict of the jury was that "Death had been caused by *delirium tremens*, and that no blame whatever attached to Mr. Teale, who appeared to have adopted the proper and necessary remedies."

The inquiry lasted three hours and a half.

Medical Intelligence.

THE MIDLAND COUNTIES' RAILWAY AND MR. SANDS COX.

The following observations by the Editor of the *Birmingham Journal* on the letter which is annexed to them, from Mr. Sands Cox to the Chairman of the Midland Railway Company, are inserted here on account of their truth and justice. It may naturally be supposed that we, as professional brethren, be biassed in Mr. Cox's favour; but when we find the same sentiments expressed by the Editor of a general newspaper, they fall with double force and severity:—

"It has often been a subject of remark, that associations of men commit acts of injustice which no individual member of the body would be guilty of. This arises

partly from the tendency of man to shift the responsibility from his own shoulders; partly from an idea that amidst the multiplicity of objects against which public indignation will be directed, he will escape censure; and partly from a popular delusion that the blame of the transaction, like the dividend of a railway company, is shared by all, and the amount that falls to each individual offender is so infinitesimally small that it is really not worth while to have any qualms of conscience about the matter. The Directors of the Midland Railway, all of whom are undoubtedly honourable men in their individual position and relations, seemed to have shared these delusions, when the subject of which the following letter treats was discussed and determined upon. The communication tells its own story:—

‘Temple Row, Birmingham
‘October 27, 1849.

‘Gentlemen,—So long an interval had elapsed without application having been made to me for the costs of the action by which I sought to recover from you my charges for operating upon and attending the poor man Higgins, that I had flattered myself you were at length convinced of the injustice of increasing the loss I have already sustained by rendering my professional services on the occasion before referred to at the instance of your Superintendent at Birmingham. I was, therefore, much surprised to receive, during the past week, a peremptory demand for these costs from your attorneys. I should have paid the demand long since, and have endeavoured to dismiss the matter from my mind, hardly as I must ever have thought myself dealt with, if I had not, in common with all my friends, entertained a strong conviction that you cannot be fully aware of the circumstances under which I am called upon to pay these costs.

‘The circumstances are briefly as follow:—I was called up in the middle of the night to attend Higgins, whose leg had been crushed in so shocking a manner by a railway carriage having passed over it, that the surgeons on the spot declined the responsibility of treating the case. I was sent to Whitacre by your Superintendent in a carriage attached to a luggage train for that special purpose. I amputated the poor man’s leg above the knee, and made two subsequent journeys to Whitacre to superintend the after treatment, (on both occasions freed by a written order of your Superintendent,) and I was successful almost against hope in saving the poor man’s life. Higgins afterwards brought an action against the Company to recover compensation for the injury he had sustained, which action was compromised in Court; and in discussing the terms of the compromise, it was understood between Higgins’s counsel and the counsel and attorneys for the Company, that the Company were to pay for surgical attendance, provided the charge were reasonable; but this term of the arrangement was purposely omitted in the memorandum endorsed on the briefs, because the gentlemen who held Higgins’s brief did not consider him liable for the surgical charges, and, therefore, thought that no indirect admission of any such liability

ought to be introduced into the memorandum. I have seen letters from Higgins’s counsel which fully bear out this part of my statement. The Company having afterwards declined to pay my charges, I brought an action to test the liability, and the Judge and Jury who tried the cause expressed a strong opinion in my favour on the merits; but a case being reserved on a legal question, the dry point of law was given against me in the Court above. It was held that your agent had retained me without sufficient authority.

‘Now, Gentlemen, if on this state of facts it is your deliberate will that I should be put to further loss, I will pay the money at once on receiving a notification to that effect from your Secretary. But I submit to you that I attended Higgins on what I believed, and had every reason to believe, to be your summons, for how could I suppose that a gentleman who had the power to send me by a special carriage was wanting in authority to retain me?

‘That the Company have had the benefit of the surgical aid rendered to Higgins, as he must unquestionably have died but for that aid; and in that case his widow and children would have had a heavy claim against the Company beyond the sum paid to Higgins.

‘That in losing my charge for attendance on Higgins, and in paying my own costs, the hardship of my case is sufficiently great without further aggravation.

‘But I wish it clearly to be understood that I do not make an appeal *ad misericordiam*: my condition of life does not render it necessary that I should incur that degradation. I have forborne to pay your costs up to the present time, solely because I cannot bring myself to believe that you demand them with a full understanding of the injustice of the claim, and because every person with whom I have conversed on the subject has expressed a similar opinion. If you will only satisfy me by a line under the hand of your Secretary, that you are in full possession of the facts and merits of the case, and that with that knowledge you require me to sustain a further loss, I will bring the matter to a close by at once paying your demand.

‘I am, Gentlemen, your obedient servant,
‘WILLIAM SANDS COX.

‘To the Chairman and Directors of the
Midland Counties’ Railway.’

‘This letter was addressed to the Board of Directors who met at Derby last week, and it is said, though the assertion seems libellous, and therefore we decline to state it on our own responsibility, “peremptory instructions were given by the directors to enforce payment of the costs, without delay, and they have since been paid by Mr. Cox.” Now, we will venture to say (assuming that this extraordinary statement is correct,) that not a member of the Board of Directors would have been guilty of the like deliberately scandalous injustice if the occurrences related in the letter had had reference to him individually. The facts of the case are honourable to Mr. Cox’s humanity, to his professional skill, to his firmness in enforcing his claim in the teeth of a wealthy company; and if the pecuniary loss be somewhat great, it is more than equalled on the

other side by the odium that must attach to a proceeding at once so flagrantly unjust, and contemptibly mean—that is, supposing this depth of associated morality has been fathomed. If the transaction be as it is here represented, then is there added to the already black catalogue of railway sins, an item which is legally permissible, and morally disgraceful.”

QUEEN'S COLLEGE, BIRMINGHAM.

At a meeting of the Council of Queen's College, held on Tuesday last, the Right Hon. Lord Lyttelton, Principal, in the chair, the following communication was received from the Royal College of Surgeons at Edinburgh:—

“October 17th, 1849.

“Sir,—I am directed by the Royal College of Surgeons at Edinburgh, to inform you that they have this day resolved to grant the same privileges to the Queen's College at Birmingham, in relation to their Board, which have hitherto been enjoyed by the Universities of the United Kingdom; that is to say, the medical lectures in your College will be received as qualifying for examination before this College, provided they shall be conformable to the regulations of this College, as regards the duration of the courses, and all other particulars, and that certificates of regular attendance, in conformity with chap. 4, sect. 8, of the regulations of the College, shall be produced by those who apply for examination.

“Sir, your obedient servant,

“JOHN SCOTT, Secretary.

“To the Dean of the Faculty, Queen's College, Birmingham.”

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, November 9th, 1849:—George Fowler Bodington, South Colfield, Warwickshire; Walter Hook Bolton, Carrickmines, co. Dublin; William Bratt, Stratford-on-Avon; George Peat Dunn, Ledbury, Herefordshire; James Howell, St. Clere, Carmarthenshire; Ralph Holt Kaye, Ratcliffe Bridge, Lancashire; Henry Nuttall, Syston, Leicestershire; John Robinson, Midhurst, Sussex; Thomas John Warburton, Betley, Staffordshire; Alexander Williams, Army.

Gentlemen admitted Members on Friday, November 16th, 1849:—Messrs. Thomas Petit Wright, Chatteris, Cambridgeshire; John Anderson, Old Kent Road; Herbert Taylor Reade, Quebec; Edward Egan, Dublin; Armstrong Todd, Dublin; Benjamin Webster, Morley Lodge, near Leeds; James Shepherd, Northallerton, Yorkshire; William John Tennant, Dublin; and Edward Gollidge Pitt, Brunswick Place, City Road.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Members on Thursday, November 8th, 1849:—Frederick John Dyer; David Henry Monckton, Brenchley, Kent; Thomas Bolland Powell, Knaresborough; Edward Rutley Ray, Millon, near

Sittingbourne; Alfred Scotchburn, Driffeld, Yorkshire; Robert Smith, Mumby-cum-Chapel, Lincolnshire.

Gentlemen admitted Members on Wednesday, Nov. 14th, 1849:—Richard Allanson Gaskell, St. Helen's, Lancashire; George Alfred Sheppard, Worcester; David Purdie Maclean, Burton, Westmoreland; Lionel Smith Beale; Philip Henry King, Grantham, Lincolnshire; James Wannes Saunders, Aylsham, Norfolk; William Henry Welsh, Eccles, Lancashire.

OBITUARY.

November 13th, at Northampton, William Percival, Esq., Fellow of the Royal College of Surgeons of England, and a Member of the Council of this Association. Mr. Percival was for upwards of twenty-nine years one of the Surgeons to the Northampton General Infirmary; which appointment he resigned owing to declining health, a few weeks before his decease. He was deservedly held in high estimation, both by his professional brethren, and by the public. James Mash, Esq., also a Member of the Council of this Association, has succeeded to the appointment of Surgeon to the Northampton General Infirmary.

BOOKS RECEIVED FOR REVIEW.

Medical Ethics; or a Code of Institutes or Precepts, adapted to the Professional Conduct of Physicians and Surgeons. By the late Thomas Percival, M.D., F.R.S. Third edition. Oxford: J. H. Parker. London: John Churchill. 1849. 12mo, pp. 194.

The Dublin Quarterly Journal of Medical Science, November, 1849.

The Monthly Journal and Retrospect of the Medical Sciences, November, 1849.

Sanitary Progress; being the Fifth Report of the National Philanthropic Association. Hatchard and Son. 1849.

London Journal of Medicine, November, 1849.

Cholera Gleanings; a Family Hand-Book, enabling readers of all classes to judge for themselves of the great error into which governments were unfortunately led, by men looked upon as infallible guides, who very strenuously maintained the Cholera to be a disease during which “The living shall fly from the sick they should cherish.” By Dr. Gillkrest, Inspector-General of Army Hospitals, &c. &c. Gibraltar. 1848.

Report on the Nature and Import of certain Microscopic Bodies found in the Intestinal Discharges of Cholera, presented to the Cholera Committee of the Royal College of Physicians of London, by their Subcommittee, on the 17th of October, 1849. London: John Churchill. 1849. Pamphlet, pp. 28.

TO CORRESPONDENTS.

Communications have been received from Mr. Wills, Mr. John Burrows, Dr. Davies, Mr. Humphry, Mr. King, Mr. Fawcitt, Mr. Giraud, Mr. Greenhow. We have received a letter from a “A member of the Provincial Association, and of the Bristol Microscopic Cholera Committee,” but too late to refer it to the proper quarter in time for the present number of the *Journal*.—[Ed. J., Worcester.]

It is requested that all letters and communications be sent to J. H. Walsh, Esq., Foregate Street, Worcester. Parcels and books for review may be addressed to the care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON SURGERY,

DELIVERED IN THE
MEDICAL SCHOOL OF CAMBRIDGE.

By GEORGE MURRAY HUMPHRY, Esq.,
Downing College, Surgeon to Addenbrooke's Hospital.

LECTURE XVI. SCROFULA CONTINUED.

Scrofulous inflammation of mucous membranes, of the palate, nose, and lacrymal sac, of the bronchi and larynx; treatment; disease of the tonsils, treatment by local applications, by excision; Scrofulous inflammation of the bladder, extending along the ureters to the kidneys; the changes induced thereby; Scrofulous inflammation of the genital tubes, testicle, and prostate; formation of abscesses in the epididymis and testicles; changes in the lining membranes of the tubes; extension of the disease from one part of the genital system to the others; the importance of examining the whole tract when one organ is suspected; symptoms; treatment; castration; question of the liability to recurrence of disease in other parts; Scrofulous disease of the synovial membrane; the formation of spots and abscesses in the thickened membrane; subsequent affection of cartilages and bones; symptoms; treatment; question of amputation.

Tubercles; their near relation to scrofulous deposits; cause of their destructive influence; varieties; organs most frequently affected by them; association of scrofula and tubercle in the same persons.

The mucous membranes in various parts of the body are particularly subject to scrofulous inflammation, and that of the palate, nose, and throat, more so than any other. Some children are observed to suffer under continual cold, as their affection is called, with accumulation of mucus in the throat and nose, and a thick nasal voice. They snore a great deal and breathe with some difficulty, keeping the mouth always open. The mucous membrane of the throat and nose is in such cases reddish, swollen, and covered with glairy mucus; perhaps its surface is excoriated, or in the worst cases it may be covered with superficial ulcers. In summer these children get better, but in winter the complaint returns. Sometimes the inflammation extends along

the eustachian tube to the tympanum causing deafness. At others the soft palate becomes affected, the mucous membrane lining it is swollen and ulcerated; the ulceration may be communicated to the bones and clear away the hard palate and septum nasi, causing sad deformity; or the lining membrane of the alveolar sockets becoming swollen the teeth drop out without evincing any sign of decay, and the alveoli themselves ulcerate and necrose. Not long ago there was a man in Maynard's ward, in whom this scrofulous ulceration, commencing apparently in the mucous membrane, had cleared away all the palate, the septum nasi, and some of the alveoli, so that in looking into the mouth we could see quite up to the base of the skull. There was at the same time attending as out patient, another man whose gums were swollen, his teeth loosening and coming out one after another, and every now and then a piece of the alveolar process of the upper maxillary bone was necrosed and made its way through the gums.

Sometimes the affection commences and is seated chiefly in the mucous membrane of the nose, causing swelling of it with superficial ulceration, or the latter may extend more deeply so as to perforate the septum or destroy the spongy and ethmoid bones. The disease is now and then associated with polypus, that is to say, the chronic inflammation of the schneiderian membrane may lead to a polyposal condition of it, but you must be careful not to mistake for a polypus the loose swollen membrane which, in consequence of its inflamed condition, hangs from the spongy bones into the nostril. The lining membrane of the lacrymal sac and canal is likely to become involved causing obstruction to the tears and watering of the eye; and unless early attention be paid to this disease, we have to fear the complete occlusion of the canal with the formation of lacrymal abscess and fistula, together with more or less caries of the adjacent bones. I may remark, that the disease of the bones here generally follows the inflammation of the mucous membrane, and the suppuration of the lacrymal sac, and may in most instances be prevented by a timely incision and the use of the style.

The mucous membrane of the respiratory apparatus may also be affected, either alone or conjointly with that of the nose and palate. Scrofulous children very often suffer from chronic bronchitis, attended with cough, "stoppage at the chest," wheezing, and the expectoration of frothy mucus. This goes on for a long time, but has no necessary connection with tubercles;

indeed, this affection commonly subsides as the child grows older, and the lungs resume their natural condition. It is well for you to beware of the nature of this scrofulous cough, and its independence of organic disease, otherwise you would be likely to give unnecessary alarm to the parents. It is a very troublesome complaint, and leads sometimes to dilatation of the smaller air tubes, and perhaps occasions permanent dyspnoea, but it is not often fatal. I have not observed that it has any very close connection with the emphysema which occurs in early life.

The scrofulous affection of the *larynx*, which takes place after puberty is a more serious affair. In the early stages it is attended with cough, expectoration, huskiness and weakness of the voice, with inability to speak clearly, these symptoms are most felt early in the morning and in damp weather. In course of time, the mucous membrane becomes thickened, indurated and uneven on its surface, giving rise to roughness or hoarseness of the voice, with difficulty of expectoration, stridulous breathing, and liability to choking, also to tenderness of the larynx so that slight pressure upon it causes cough. Numerous minute ulcers form upon the surface of the membrane, or larger ones extend deeply into it and attack the cartilages. This disease is frequently associated with tubercles in the lungs. The local treatment of it consists in the application of astringent solutions,—such as nitrate of silver,—by means of a sponge passed into the throat, or what I think more frequently gives relief, a seton placed near to the larynx.

I know scarcely any class of chronic inflammatory affections which are less amenable to treatment than this disease of the mucous membrane of the nose, palate, and respiratory apparatus, which I have been describing. The residence in a mild climate, or by the seaside is perhaps the most effectual means of combating the disorder. Where this cannot be done we are obliged to be content with the measures which are most likely to improve the general health, adopted according to the rules which I laid down in a former lecture, and modified to meet the requirements of the particular case. Cold ablutions, more particularly the shower bath, have some influence in invigorating the system and diminishing the liability to suffer from changes of weather. You can try the application of astringent lotions to the inflamed membrane, but I must say that I have not seen much benefit from local applications of any kind. I ought perhaps to except the employment of setons and other forms of permanent counter-irritation, which are of some service, and should be employed in the worst cases, more particularly when the bones are beginning to suffer. In milder cases, after having resorted to the usual remedies, I am generally content with endeavouring to palliate the symptoms and rest in the hope, that as the patient grows older the system will acquire sufficient strength to throw off the disease.

The disease of the palate is sometimes preceded and attended by the formation of little grey spots in the tissue, dependent partly on the deposit of ill-organised

lymph, and partly also, perhaps, on the degeneration of the structure of the mucous membrane itself. These spots softening and bursting, become so many centres, from which the ulceration proceeds just in the same manner as in the corresponding disease of the skin, described in the last lecture. I have seen several of these cases, and I regret to say that I have not known decided benefit afforded by any of the various means of treatment adopted. In some the ulcers have spread into one another, till the whole palate has been involved, the bones destroyed, and the patient becoming weaker has sunk under the local disease and the accompanying constitutional debility. When the result has been more favourable, it has appeared to be due rather to change of abode and mode of life, or to the restorative powers of nature, than to any medicinal agency.

The tonsils are often enlarged in scrofulous persons, with or without accompanying inflammation of the mucous membrane. The disease seems to consist in a simple hypertrophy of the follicular basis, of which they are composed, without much alteration of structure. Sometimes they contain yellowish white spots, scattered through their substance, which look more as if they proceeded from discoloration of the tissue than from any new deposit into it. The tonsils thus enlarged are painless, and do not interfere with deglutition unless they are inflamed, but they alter the voice, and render the patient liable to sore throats, which are lingering and very distressing, sometimes even alarming, from the difficulty of breathing, occasioned by a lodgment of mucus in the narrowed passage of the fauces. On this account we are required to treat them. I have in some cases diligently persevered for months in the application of nitrate of silver and iodine, but I cannot say that the result was very satisfactory. As the child grows up, and more particularly after the period of puberty, they often diminish in size spontaneously; but if they are the cause of much trouble, it is worth while to remove them, which is very easily done with a probe-pointed bistoury and a vulsellum, provided the patient is old enough to exercise a little self-control, and does not resist the operator. In children the operation is very troublesome, and I am unwilling to resort to it on that account, and from the fear of bleeding. I once knew hæmorrhage take place to rather an alarming extent after the removal of a tonsil in a young man, but it ceased after a time, when he was kept quiet, with his head raised. In speaking of the removal of a tonsil—I mean that part of it which projects beyond the level of the pillars of the fauces—a portion of the gland is almost always left behind; and though I have heard the operation objected to on the ground that this remaining fragment is likely to enlarge, and have in consequence watched several cases for a considerable period, I have not known this to take place in any one.

The mucous membrane of the urinary and genital system is also very liable to inflammation in scrofulous persons. When affecting the bladder it forms a very troublesome complaint, giving rise to symptoms resembling those of stone, viz., frequent and painful

micturition, the pain being felt over the pubes as well as at the extremity of the penis; sometimes there is incontinence. The urine generally contains a good deal of mucus or pus, and is sometimes tinged with blood; it is not that tenacious, white of egg-like, ropy mucus, adhering to the bottom of the vessel, which we are in the habit of seeing in common catarrhal inflammation of the bladder, but it forms a loose, white, milky sediment, and contains, perhaps, soft white flakes of lymph: it is commonly alkaline, and there may be particles of phosphate or carbonate of lime in it.

If the bladder be examined where such symptoms have existed during life, the mucous membrane is found to be vascular, thickened, soft, and velvety. It may be covered with minute flakes, or an entire coating of lymph. Adhering to the lymph may be seen, as in this specimen, a white powdery substance, composed of carbonate and phosphate of lime. Sometimes the surface of the membrane is rough and excoriated, or the ulceration may have proceeded more deeply, and you may find several small circular ulcers, proceeding from central points of grey deposit, like tubercles, and running together, so as to form larger ulcers; or there may be, as you see in this specimen, a more extensive deposit of soft grey substance in the structure of the mucous membrane, and in the submucous tissue, with ulceration commencing at many points, and forming a large, ragged, dirty surface, resembling much the corresponding disease in the mucous membrane of the palate and in the skin.

Not uncommonly the inflammation is found to have extended along the lining membrane of the ureters up to the kidneys. Here is an instance where the ureter is enlarged nearly to the size of my little finger, and choked up with a soft, yellowish, white substance, so as to leave only a narrow channel down the middle, through which the urine continued to trickle. This condition extends quite up to the kidney, and you observe that the pelvis and calices are also much dilated, their lining membrane swollen, and covered with a soft white secretion, composed probably of diseased epithelial scales, mixed with a substance intermediate between pus and the lymph of scrofulous inflammation. There are also yellowish white spots in the substance of the swollen membrane. Some of these have softened, and their contents have been washed away, leaving small cavities, which look like ulcers. In the substance of the kidney are other spots and cavities, which may be sections of the urinary tubes, diseased in the same manner as the pelvis and calices, or they may result from independent deposits into the glandular structure of the organ. Some of the cavities are of considerable size, having been occasioned no doubt by the coalescence of smaller ones.

Here is another specimen where the pelvis and calices are enlarged in the same manner as in the last, and there is thickening, with ulceration of the mucous membrane; the glandular substance of the kidney is also studded with yellowish white spots, varying from the size of a pin's head to that of a pea. The larger ones are softened in the centre. In this

third specimen the disease has gone to such an extent, as to obliterate entirely all trace of the glandular structure of the organ. The capsule only remains, and the space which should be occupied by the kidney is filled up with white, crumbling, cheesy deposit. There is no appearance of softening having taken place to any great extent, and it is probable that the disease had been for some time in a quiescent state, or at any rate was not making very active progress.

Now, a precisely similar disease to that which I have been describing in the urinary tubes and kidneys, is of no uncommon occurrence in the genital tubes and testicle; moreover, the two sets of organs are frequently affected in the same person. The convoluted series of tubes at the two ends of the vasa deferentia, viz., the vesiculæ seminales in the one direction, and the epididymis in the other, are generally attacked first, and the disease extends from them to the adjacent glands, to the prostate from the former, and to the body of the testicle from the latter.

These two specimens, which I took from a patient who died in the hospital of phthisis not long ago, are a good illustration of the disease. In this the epididymis is seen to form an oblong knotty swelling, the convoluted tubes of which it is composed are distended with a soft white putty-like substance, the rete testis is indurated, and of a yellowish-white color, the same change having commenced in it, but the body of the testicle is healthy, with the exception of a few small white spots, like tubercles, in its hinder part. The vas deferens, where it leaves the epididymis, is large and knotty, but gradually resumes its natural size, and is continued so in its course into the pelvis. Here are the vesiculæ seminales and prostate from the same patient, and you see the vas deferens again enlarging as it descends; the vesiculæ seminales are swollen, their tubes being distended in consequence of the thickening of the lining membrane and the accumulation of soft putty-like substance in their interior. The section of the prostate gland shows it likewise to be the seat of yellowish-white deposit in several places.

As the disease advances the tubes become more distended, the scrofulous substance contained in them softens into a curdy fluid, with which some pus is intermixed; the lining membranes of the tubes become impregnated with the same substance, deposited in spots, or more generally infiltrated through their tissue. The membranes are in this manner destroyed, and the natural structure of the part is lost by the fusion of the tubes into cavities which, enlarged by the increasing accumulations in their interior, project from the epididymis into the loose tissue of the scrotum, surround the testicle, and at last burst through the skin, discharging their contents, and leaving sinuses. The sinuses thus made often remain open for months and years, forming channels of communication between the interior of the epididymis and the surface of the body. They discharge a thin fluid, in which spermatozoa may be sometimes found.

You observe that the disease consists not simply in the accumulation of scrofulous substance in the tubes,

but that the lining membrane of those tubes also undergoes a change. In this specimen, for instance, the smooth swollen membrane which lines one of these cavities formed in the epididymis, contains in its substance numerous small greyish spots, and these would, no doubt, in course of time, have softened and formed cavities or ulcers. I cannot tell whether these spots are occasioned by a distinct deposit in the swollen membrane, or whether they result from a degeneration of its structure. The examination of these and other instances of scrofulous disease, particularly when it affects synovial membranes, seems to show that the latter is often the case, for the spots appear to consist at first of a mere discoloration of the tissue, and to be united to it by continuity of structure.

The softening and formation of abscess takes place in the same manner in the prostate gland and vesiculæ seminales, though less frequently in the latter. The abscesses in the prostate make their way slowly through the perineum, and leave urinary fistulæ; or they burst into the urethra.

I produced to you just now a specimen in which, with much disorganisation of the epididymis, there were only a few spots like tubercles in the body of the testicle. In the one I now show you the disease has made its way into the latter so as quite to annihilate its glandular structure. The swollen lobules still remain distinct, and the septa between them were so free that they could be easily separated from one another, but the tubular character of the lobules is entirely lost, and each one is seen to be reduced to a homogeneous, friable, putty-like substance. Some of them were softened in the centre, their contents have escaped, and you see the cavities remaining. The epididymis is occupied by abscesses, some of which still contain a curdy fluid; others had burst through the scrotum. The vas deferens is as large as a goose quill, and is choked up with scrofulous substance. I removed this testicle from a man aged about 35, before I was acquainted with the pathology of the disease, and the extent to which it affects the whole system of genital tubes. I had subsequently reason to believe that the vesiculæ seminales, as well as the prostate, were involved, and the other testicle began to show signs of unsoundness. The case, together with what I have said respecting the usual progress of the disease, will impress upon you the necessity of examining so much of the genital apparatus as lies within your reach when any one part of it is affected; and you will often be able to confirm your diagnosis as to the presence of scrofulous inflammation in one organ by the condition of the others. For instance, when a patient presents the symptoms of this disease in the bladder, you should not fail to examine the testicles, particularly observing the state of the epididymis; you should also pass the finger into the rectum to ascertain the condition of the prostate gland and the vesiculæ seminales.

The scrofulous disease of the testicle which I have been describing is of common occurrence. Sometimes it occurs as the remnant of acute epididymitis, but more frequently it begins insidiously, and proceeds with

little or no pain. A patient applies to you in consequence of enlargement of his testicle, which is attended with some uneasiness in the part, and some aching in the loins. You find the epididymis enlarged, with soft swellings, perhaps, projecting from it; the vas deferens may be also large and knotty. At first you can distinguish that the body of the testicle is healthy, but it subsequently ceases to be so, or it becomes so lost in the swollen epididymis that you can gain no information respecting it. You will not, in such a case, forget to examine the other testicle, the vesiculæ seminales, and the prostate, and to inquire into the condition of the urine and the state of the bladder.

The several cases which have been, and now are, attending at the hospital, have given you reason to know that the scrofulous affection of the urinary and genital system, particularly of the testicle, is by no means more easy to cure than the other forms of scrofula. In some of those cases we have tried a variety of remedies without any apparent advantage. In truth, it is generally accompanied by fewer indications of treatment than most other scrofulous affections, and, though like them, associated with want of vigour of the nutritive functions, it is, I think, less commonly accompanied by the symptoms of disorder of the digestive system. You will find it a rule, with exceptions no doubt, that the scrofulous cases which are devoid of that accompaniment, are the most difficult to cure, because they are the most directly and completely dependent upon the constitutional defect. The measures most conducive to the general health must be tried, such as simple and nutritious diet, fresh air, and tonic medicines. The application of a solution or ointment of iodine, so as to produce slight irritation of the scrotum, may do some good. The internal administration of iodine and cod-liver oil are also sometimes beneficial. There is no doubt that many of these cases get well as the patients become stronger; we may, therefore, encourage them with the prospect of a cure, though we are unable by any direct means to contribute very greatly to it.

The prospect of acute inflammation degenerating into this tedious and destructive chronic disease, will make us especially anxious to arrest the disorder quickly when called upon to treat the common "*hernia humoralis*" in persons of delicate scrofulous habit. We shall be careful that no traces of it are allowed to linger behind, especially as in the debilitated state to which the patient is reduced by an acute attack the organ is often slow to recover its natural condition, and if the antiphlogistic treatment, with confinement to bed, be continued too long, the chronic disorder may not unlikely be engendered.

We are sometimes called upon to consider the question of the removal of the organ. It is seldom imperatively necessary to do this, but when the disease has so destroyed the natural structure of the organ as to render the restoration of its function improbable, it is advisable to remove that which has become a mere burthen and source of annoyance, especially if the patient be confined to bed in consequence of it, and his

strength is being weakened by the successive formation and bursting of abscesses, and by the discharge from them. I do not think that the existence of the disease in other parts of the genital system is of itself sufficient to preclude an operation, because in the cases which I have seen, the removal of the one testicle has not been followed by an increase of the disease in the other, but on the contrary the remaining organ has appeared to fare rather better, and to recover more quickly. The experience of one person, however, cannot furnish sufficient data for the decision of such a point as this.

There is one other circumstance which I must mention to you before dismissing this subject of the scrofulous disease of the testicle, and that is its frequent association with phthisis pulmonalis. This has happened in about one half of the cases I have seen.

In the scrofulous disease of the bladder, especially when the urine is alkaline, small doses of the mineral acids, given in bitter infusions, are often productive of benefit; also iodine, in the form of the iodide of potassium, and the preparations of steel. It is very important to rectify any disorder of the digestive organs that may accompany it, for all the inflammatory affections of the bladder are much influenced by the state of the stomach, and care in diet must be strictly enforced. If, in spite of these precautions and remedies the disease still lingers, or shows a disposition to increase or spread to other parts, you had better adopt some permanent counter-irritation, such as an open blister, or, still better, a seton above the pubes or in the loins.

The genital organs in the female are also liable to scrofulous inflammation. There may be deposit of lymph and abscess in the ovary, but that is not common. The Fallopian tubes are more frequently the seat of this disease. Here you see a specimen where those tubes are lengthened, contorted, and greatly enlarged. They increase in size towards their free extremities, which were adherent to the surrounding parts. The mucous membrane lining them is much swollen, and of a yellowish-white color, having undergone the same change as the mucous membranes of the ureters and vasa deferentia in the specimens I just showed you. The tubes also contain some soft scrofulous matter. The uterus itself is healthy, though of small size. Here is another remarkably small uterus taken from a person who was of a scrofulous constitution. This disease of the Fallopian tubes, though existing in a much slighter degree than in the specimen before you, would be likely to occasion sterility.

The scrofulous disease of the *synovial membrane* is the most common cause of white swelling of a joint. In the early stage the membrane is merely thickened, has a somewhat granular appearance, and is semi-opaque, of pale colour, with a brownish or reddish tinge. Soon it is found to be mottled with white spots of various sizes, scattered more or less thickly through it; sometimes they look like mere minute specks, at others they consist of a discoloration of considerable portions of the thickened membrane. As I have before said, these spots seem to depend rather upon a change taking place in the structure of the already diseased

membrane than upon any fresh deposit into it. However this may be, they frequently soften into a white curdy fluid, become connected with one another in the same manner as small abscesses do in other parts, and either burst externally or find their way into the cavity of the joint.

This remarkable specimen of the disease was removed in the hospital, five or six years ago, from a young man of scrofulous constitution. The knee was greatly swollen, but not very painful or tender; he could move it, but could not raise the limb from the bed, or bear the slightest weight upon it. The synovial membrane is thickened to an enormous extent, especially where it forms the cul de sac above the patella, and in other situations where it is naturally loose and folded. It is of a pale semi-opaque colour like brawn, and there are numberless white spots in its substance. Some of these have softened, forming cavities which contain a turbid fluid. These cavities have no distinct lining membrane, being mere hollows in the thickened synovial structure. There are other larger cavities formed by the confluence of the smaller ones. The cartilages remain quite healthy, the ligaments are merely somewhat stretched, and the tissues in immediate contact with the synovial membrane had not undergone any change or even acquired preternatural adhesion to it.

It sometimes happens that, instead of the grey spots in the substance of the thickened membrane or in company with them, a deposit of soft curdy substance takes place upon the interior of the joint. When this deposit is washed away the surface of the synovial membrane is found to have lost its polish; perhaps it is studded with the grey spots, or is more or less ulcerated in places. These ulcers, making their way through the membrane, give rise to disease of the bone at the margins of the articular cartilages as well as to abscesses which burst externally. Even in the cases where the disease proceeds chiefly from the interior of the joint, the cartilages are often not much diseased. Sometimes, however, they are ulcerated or holes are formed in them by the pressure of projecting processes of synovial membrane which induces absorption of them,* or they become loosened from the bone beneath and undergo absorption in that direction.

This disease attacks most frequently the knee, the ankle, the elbow, and the wrist joints.

In the ordinary cases of white swelling, where the disease is not associated with a scrofulous habit of body, the synovial membrane becomes thickened, pulpy, and of brownish color, but it is not affected with

* I am aware that a difference of opinion exists respecting the mode by which these holes connected with projecting processes of synovial membrane are occasioned. Some pathologists, observing the accuracy with which the cavities are filled by the synovial processes, imagine that these latter are the active agents in the work of destruction, that they encroach upon, and eat away, the surface of the cartilage, and so form cavities which are exactly suited to themselves. Others conceive that the synovial processes merely project into and fill up the vacancies occasioned by ulceration which is the result of an active process going on in the cartilage itself. Probably, the truth lies between the two opinions, the absorption or ulceration taking place in the inflamed and softened cartilage, and being induced in it at particular points by the pressure of the synovial membrane. The latter is the excitator, though not strictly the agent in the work of destruction.

spots and the formation of cavities in its substance. The ulceration of the cartilages also forms a more prominent feature and is attended with more marked symptoms.

The chief and often the only early symptom of this scrofulous disease in a joint is the swelling, which is soon attended with more or less stiffness, and some uneasiness or even pain. You will be surprised how little suffering is in many cases occasioned by the disease, even when it is advancing to its more destructive stages. I do not know any sure signs by which you can discover what are the precise changes in the synovial membrane. The feeling of fluctuation is so deceptive that it is not easy to distinguish whether the swelling of the joint depends upon thickening of the membrane or effusion into the synovial cavity. Still less can you decide with any certainty as to the presence of the white spots I have so often mentioned in the thickened membrane, though you may form some conjecture respecting them from the constitutional predisposition of the patient. Even in the latter stages of the disease when an abscess comes forwards and bursts, it is not easy to decide whether it originated in the substance of the thickened membrane or whether it proceeded from the interior of the joint. Happily this accuracy of diagnosis is not very important with regard to the treatment, for in instituting that we must be guided as to the particular remedies to be employed by the state of the patient's health and the general condition of the joint.

I think it is very important that the patient should not be confined to bed or to the house, more than is absolutely necessary; for I am quite certain that the local disease is often much aggravated in consequence of the injury to the health occasioned by close confinement. At the same time, it is important that the joint should be kept quiet when it is at all tender, painful, or uneasy after exertion. To secure this it is a good plan to fix and support the joint by means of bandages, plasters, and leather or gutta percha splints, while the patient is allowed to go out upon crutches. The tincture or ointment of iodine applied every night and morning, so as to produce some irritation of the skin, but not sufficient to prevent the limb being bandaged during the day, is one of the best local applications. It may be alternated with other stimulating liniments, with blisters, or, in slight cases, with the cold douche. When abscesses form I generally allow them to burst, because their contents are thus discharged more freely and the slight loss of skin occasioned thereby is not very important.

I have tried the cod-liver oil in many of these cases,—in a few with decided advantage, but in many instances it seemed to do no good. I cannot say that I have found iodine administered internally of much service in this disease.

The question of amputation is to be entertained when the destruction involving the cartilages and bones has gone to such an extent as to leave little prospect of the restoration of a useful joint, or when the health is beginning to fail under the confinement and irritation occasioned by the local disease. You must beware of delaying the operation too long, or of attempting it

when the bodily powers (naturally feeble) are reduced to a low ebb; for, if that be done, the wound will not heal, or any slight cause, such as a cold, or an attack of diarrhoea, will be sufficient to disturb the reparative processes, to occasion the re-opening of the wound, and may give a fatal termination to the case. It is an interesting matter to decide what influence upon the future health of the patient is likely to be produced by the removal of a limb affected with scrofula; also, whether the disease is to be looked for in other parts of the body with greater probability than if the primary affection had been allowed to remain. I do not profess to have had the experience necessary to enable me to venture a decided opinion upon such points as these, and I only state my general impression that the removal of scrofulous limbs does not impair, but on the contrary, rather improves the general health, and that it does not render the patient more liable to the occurrence of scrofulous inflammation in other regions.

If you have studied the pathology of *tubercles* at all you cannot have failed to remark their close apparent resemblance to those little deposits of ill organised lymph I have been speaking about, which form a prominent feature in scrofulous disease, occasioning so much destruction of tissue, and giving rise to the formation of ulcers, in consequence of the softening and supuration they have a tendency to undergo. It is probable, I think, that the relation between tubercles and these deposits of scrofulous lymph is not one of mere external resemblance, but that they are in their real nature and essence very closely allied.

A tubercle consists of a small mass of heterogenous substance interstitially placed with regard to the tissues in which it is embedded. It does not increase to any great size, but it softens and suppurates, destroying at the same time the tissue involved with it, and so forms a cavity. The contents of this cavity, increasing like those of an abscess formed in any other manner, occasion absorption or ulceration of the structures intervening between them and the surface, and are discharged. About the time that the softening commences, inflammation is set up, and lymph effused in the circumference of the tubercle, walling it in, and forming the lining of the cavity. The destructive effects of tubercles depend not upon the ability of each one to attain to a great size, and, like a cancerous growth, to go on spreading at one part while it is softening at another, but upon their disposition to occur in considerable numbers, all of them running the same course, and forming cavities, which coalesce into larger ones, and so make great havoc, sometimes hollowing out, as in this specimen, the entire substance of the lung. An individual tubercle, when it has softened and burst, has done its worst; the cavity left by it is lined with the common lymph of inflammation, which would contract and cicatrize, and there would be an end of the matter, did not other tubercles exist in the neighbourhood undergoing the same changes, bursting into this cavity, and continuing the work which the first had begun.

When I suggest that tubercles are nearly related to the scrofulous deposits which I have described to you in this and the former lectures, I do not mean to intimate that they are dependent entirely upon inflammation, or that they consist of masses of lymph strictly so called, for there is often, indeed commonly, no evidence of their being preceded or accompanied in their first stages by any inflammation; and you remember that according to our definition made on a former occasion, lymph is effused fibrin altered by the inflammatory process; but I mean, that they probably consist of some of the imperfectly elaborated components of the blood, the albumen or the fibrin, changed, it may be, in some manner, and effused among the tissues. These remarks apply also in some measure to the scrofulous deposits, which are often preceded by no signs of inflammation, and which sometimes seem rather to excite than to depend upon that process.

Both in the scrofulous and tuberculous subject, particularly the latter, when genuine acute inflammation is induced, the effused lymph, partakes more nearly of its ordinary or healthy characters. Sometimes, however, even then, it has the constitutional defect impressed upon it, giving rise to what is called tuberculous and scrofulous infiltration, which is not always confined to small spots and masses, but may extend through a considerable space.

The degree in which tubercles differ from the ordinary scrofulous deposits varies according to the constitution and age of the patient. In the young, light complexioned, delicate patient, who presents the signs of the scrofulous diathesis most strongly, the tubercles are from the first large, of yellowish-white colour, and cheesy consistence, closely resembling, in short, the common scrofulous deposits; so closely, that the one can scarcely be distinguished from the other. They are attended with inflammation in an early stage, soften quickly, and run their course in a comparatively short period. In older patients, and in the dark-haired, thin, active persons, who exhibit fewer traces of a scrofulous habit, the tubercles are at first much smaller and harder, forming little semi-opaque horny grains, which easily escape notice; these have been called miliary tubercles. They are slower in their changes, remaining sometimes quiescent, or advancing but little for months. In their progress they increase a little in size, become more opaque, of white or yellowish-white colour, so as to resemble those last described, and then gradually soften and form cavities. These miliary tubercles have been thought to form the early stage of those first mentioned, and so, no doubt, they often do, but the large white tubercles are very frequently found presenting their own distinctive characters from their first commencement in the class of persons I have mentioned.

The softening of tubercles, though generally accompanied by some inflammation and deposition of lymph in their circumference, is in all probability independent of that inflammation, or rather may be regarded as its exciting cause. It seems to depend upon some quality inherent in the tubercles themselves; often it begins in the centre, and forms a cavity there, so that when the

tubercle is opened it looks like the divided end of a tube. This appearance has given rise to the mistaken notion entertained by Carswell and some other pathologists, that tubercles of the lungs consist in a concentric deposit within the minute bronchial tubes.

Tubercles, and as I have just said, the small grey miliary tubercles particularly, sometimes fall into a quiescent state, become dry, and the surrounding pulmonary tissue loses its increased vascularity. Even after softening has commenced they sometimes retrograde, drying up, and undergoing calcareous transformation, while the lymph effused into the surrounding pulmonary tissue contracts upon them, and gives rise to a puckered appearance, like a cicatrix. We often find in old persons these traces of the tuberculous disease of early life. Whether they are ever absorbed in the early stages, and disappear entirely, so as to be quite cured, is uncertain, though it is probable that they do so.

The lungs are more frequently the seat of tubercles than any other organ of the body, and the distinctive characters of the morbid product are most clearly marked in them. On the peritoneum also, they are of common occurrence, both the small, hard, grey tubercles, and especially the large, soft, white ones, which have a near resemblance to scrofulous deposit, and which, as I have just intimated, seem to form the connecting link between tubercle and scrofula. In the liver, spleen, and brain, tubercles are less common, and approximate still more closely to scrofulous masses; and in the absorbent glands, the skin, and the bones, the deposit which I have described as the result of scrofulous inflammation, is by many pathologists ranked under the head of tubercle.

I do not think that persons who suffer from scrofula are much more liable to tuberculous phthisis than others. This is scarcely to be considered an argument against the supposition of the two diseases being very nearly allied, and is no more remarkable than the fact that each of them is so frequently confined to a particular organ, or a particular class of tissues. Tubercles are often found only in the lungs, and I told you on a former occasion that scrofulous affections are very commonly limited either to the absorbent glands, the skin, or the bones, in individual cases. Even if tubercle and scrofula be *identical*, each deriving its peculiarities from some quality of the organ affected, it is no wonder that the two are not found to coexist more frequently.

I have already mentioned that the scrofulous disease of the testicle is very often associated with tubercles in the lungs, and I have observed that the same is true of scrofulous abscesses on the thorax connected with disease of the ribs. There are patients at the hospital at the present time whose cases illustrate the truth of this remark. It is also a general impression, and, I think, a well-founded one, that patients who, in early life, were troubled with scrofulous affections, are, after the age of puberty when the disease of their childhood has passed away, very liable to fall victims to tuberculous disorganisation of one or other of the internal organs.

CASE OF LONG RETAINED PESSARY.

By JOHN BURROWS, Esq., M.R.C.S., LIVERPOOL.

October 11th, 1847.—I was called to visit Mrs. N., aged 63. I found her in bed, considerably reduced, tongue coated with moist white mucus; pulse small, quick, soft and feeble; all the symptoms indicated constitutional debility. She informed me that she had worn a pessary for more than twenty years, and during the greater part of that period she had cleaned it by turning it towards the vaginal aperture and washing the part opposite to the genital fissure; then moving it away, and bringing another part within reach and washing it, she proceeded until she had washed the entire circle. At length the surface became rough, by the partial decay of some of its substance, and gave her so much pain, that she discontinued turning it, and consequently only cleaned the anterior part of it. For more than a year it had occasioned pain in the vagina and fundament, and from both a purulent discharge. On making an examination per vaginam, I felt a wooden ring or circular pessary, which I advised her to have removed, to which she most gladly consented. I immediately attempted to remove it, by passing my finger and hooking it over the ring; on making some traction, she complained of pain, and desired me to allow it to remain. I again drew it down towards the os externum, when a few drops of dark-coloured blood followed, occasioned by the rough surface of the instrument having excoriated the organised parts through which it passed, but I could not draw it much nearer. On exploring the vagina with my finger, and endeavouring to pass it all round the pessary, I discovered that the cause of its retention was a membranous band, one inch and a half in breadth, which arose from the upper and posterior part and passed over the pessary to the anterior and inferior parietes of the vagina, thus forming a membranous link, which held the pessary *in situ*. I then determined upon attempting to divide the ring of the pessary with the bone-nippers, and afterwards to cut a small piece out of it, and then turning it round in the band till I brought the divided extremities to the edge of the band, I hoped to slide it along, passing one end behind and the other before the band. I saw her again on the 13th, in company with Mr. Marsh, who kindly assisted me. I passed a piece of tape over the pessary and drew it as near the vulva as the band would allow, then gave the tape to Mr. Marsh, who held it in the same position, whilst he separated the labia and I cut out a piece as I had before determined, but I could not draw it out of the band. The tape was again introduced, and the pessary retained as before, and another piece snipped off. After considerable manipulation I withdrew it in the manner I had previously thought of. The uterus is now behind the membranous band, which forms a natural pessary, and entirely prevents the prolapsus uteri. In three weeks after her health was established, and she is now grateful for the assistance afforded.

I have not read of a case of retained pessary in which the instrument, by a vital process, became united to the parietes of the vagina, and thereby effected a natural cure of the prolapsed uterus, which it was only intended to relieve. The theory of the *modus curandi* is very simple. The rough surface of the decayed pessary, by the frequent attempts of the patient to turn it round in the vaginal cavity, for the laudable purpose of cleaning it, abraded and irritated the mucous membrane of the vagina; inflammation was established, lymph then exuded, and was finally organised so as to form a vital bond of union between the interior of the vagina and the supporting pessary.

 OPERATION OF PARACENTESIS THORACIS
FOR EMPYEMA.

By HENRY EWEN, Esq., M.R.C.S., Long Sutton.

 To the Editor of the Provincial Medical and Surgical Journal.

SIR,—The following case of empyema having recently occurred under my observation, I forward you the notes for insertion in the *Journal*.

Yours truly,

HENRY EWEN.

Long Sutton, October, 1849.

August 14th, 1849.—I was requested to visit with Mr. Parsons of this town, John Bush, aged 8 years. I heard that he had been ill two months, and that his illness commenced with an attack of pleurisy of the left side, for which leeches were applied, and other treatment adopted. When I saw him he was greatly emaciated, and had incessant cough, the expectoration being purulent and highly offensive; respiration hurried; pulse 140; he could not lie on his right side; the left side was dull on percussion throughout; respiratory murmur absent; the heart was displaced, and could be seen and felt pulsating under the right nipple; the left side measured three quarters of an inch more in circumference than the right; appetite good; bowels regular; no night sweats. Little doubt could be entertained that there was a large quantity of fluid in the left pleural sac, which had compressed the lung against the spine, and displaced the heart. Before having recourse to the operation of paracentesis, however, we thought it right to make an exploratory puncture with a very fine trocar and canula; this was done between the sixth and seventh ribs, and a drop or two of pus escaped through the canula. A hydrocele trocar and canula was then introduced at the same spot, and about a pound of very thick and highly offensive matter was evacuated. The canula was allowed to remain in the wound, and was closed with a stopper of wood.

16th.—Considerably relieved, having rested well during the night. On removing the stopper no matter escaped, although he was placed horizontally, and inclined on his left side.

17th.—It was found that the canula had become blocked up with some tough fibrin, and as matter was escaping by its side, it was withdrawn, when about two pounds of matter passed out of the chest.

18th.—Greatly relieved; pulse 120; respirations 36.

22nd.—Expectorates freely viscid pus, and similar matter is discharged by the wound; the left side still continues dull on percussion; respiration behind the scapula bronchial; anteriorly, and above the nipple, tubular; vesicular respiration totally absent on the left side, natural on the right side; the heart pulsates at the ensiform cartilage; pulse 108. Water-dressing applied to the wound, and flannel bandage around the chest.

29th.—Respiratory murmur distinct anteriorly, and above as far as the nipple; natural resonance to the same extent; pulse 96.

September 5th.—The heart is in its natural situation; respiratory murmur can be heard low down on the left side; the wound has healed. The medical treatment consisted in the exhibition of quinine, iodide of potassium, and an occasional mild alterative aperient. The diet was good and nutritious.

October 10th.—His health seems now well established, and the contraction of the left side not considerable.

ON TURNING,

AS A SUBSTITUTE FOR CRANIOTOMY & THE LONG FORCEPS.

By GEORGE KING, Esq., M.R.C.S., BATH.

To the Editor of the Provincial Medical and Surgical Journal.

SIR,—Many months since I sent to the late Editor an article in reply to Dr. Simpson's theory of turning and the use of the long forceps, in cases of deformity of the pelvis. Although Dr. Streeten wrote me to say it was in the hands of the printer, and he would send me a proof, it was not sent, and you have since informed me that it was not among the papers that came into your possession as his successor. My attention has again been drawn to the matter by Dr. Radford's remarks on the same subject. Should my ideas or any remarks I may make on this important and highly interesting subject appear late on my part, considering that the papers which have called them forth have now been nearly two years before the members of the Association, this introduction will be an answer, if you should think them of sufficient importance to be inserted in an early number of the *Journal*.

I am, Sir, &c.,

G. KING.

Bath, November 18, 1849.

I am quite aware, that in drawing the attention of the profession to, and in opposing, a new theory, (introduced and recommended to be practised by all those who may be about to enter into the practice of this peculiar branch of our profession by one who stands

so high in his profession, and whose practical information and opinions, as a professor of midwifery, are worthy our notice, and whose acknowledged acquirements in the obstetric art justly and deservedly entitle him to the respect and esteem of his professional brethren,) that I am incurring a responsibility and laying myself open to the criticism of others. But this ought, and should not, deter any member of the Association, who has had some practice in obstetrics, although he may not stand quite so high in his profession, or be esteemed quite so much by his brethren as the Professor, from pointing out and exposing a practice that he considers bad, and, in great deformity of the pelvis, impracticable; and being taught and promulgated by an obstetric professor, it is moreover calculated to cause much mischief, besides misleading young practitioners in midwifery. Observations founded upon experience are the surest test and guide to truth in every science, and when applied to the prevention, relief, or cure of diseases, are alone more likely to succeed than the most refined and plausible theories, when these are overlooked, or disregarded and set aside.

I fear the learned Professor has not had a great deal of practice in turning; for to turn a fœtus in utero, in a well-formed pelvis, and under the most favourable circumstances, is a thing not at all times so easily done; and it is very singular that, although turning is the principal feature in the Professor's new theory, he has not given any directions as to how it is to be effected. Great rigidity of the soft parts, and violent contraction of the pelvis, are very powerful obstacles to the turning of a child, and will often require all our energies, mental as well as physical, to overcome them; and those who have had to contend with them will not easily forget the mental exertion and bodily fatigue they had to endure in performing it. The profuse perspiration trickling down the face, the cramped and benumbed hands, so much so as to render them almost useless, and the whole muscular strength of the arms paralyzed, are feelings calculated to make lasting impressions, and they are such feelings and sensations as we are not likely to suffer in the performance of any other surgical operation, and yet the Professor has passed them over unmentioned, and his pupils and his readers are recommended to adopt a new mode of practice, on a delicate subject, and at the most critical period, which, under ordinary circumstances, requires the utmost promptitude and vigour of action, as well as great coolness and caution, without laying down any rules for its performance, or any reference to the difficulties and dangers attending it. Smellie, an author he often refers to in his paper "On Turning," says,—“If the accoucheur begins to work in a hurry, and exerts his utmost strength at first, his hands will be so cramped and enervated that he will be obliged to desist and give them some respite, so that it may be a long time before he recovers the use of them; and even then they will be so much weakened as to be scarce able to effect the delivery.”

The Professor's own case, which he has published in his introductory remarks to these papers, was a

failure, as he did not save the life of the child; and as he is the author of the new theory of "Turning, as an Alternative for Craniotomy and the Long Forceps, in Deformity of the Pelvis," he shall tell in his own words the effect of it in his own practice:—"I proceeded shortly after nine in the evening (the labour had commenced in the forenoon) to make the mother inhale the vapour of sulphuric ether, and to extract the child, as I had previously determined to do, by the operation of turning. The os uteri was so dilated as not to offer any impediment to the introduction of the hand; the head was pushed aside, and a knee seized with great ease. With this hold the infant was readily turned, and its extremities and trunk drawn down, but the extraction of the head through the distorted brim was a more difficult task. After the arms were brought down very great exertion in the direction of the axis of the brim was required before the head was extracted, still not above two or three minutes elapsed from the first introduction of the hand till the complete extraction of the infant. It gasped several times after it was born, but full respiration could not be established. Its head was compressed laterally, the left parietal region flattened, and the anterior of the right parietal bone deeply indented by the pressure to which it had been subjected against the projecting promontory of the sacrum." Turning in this case seems to have been very easy, no doubt from the effects of the inhalation of the sulphuric ether. Those who have had to turn a child in utero during syncope, or in cases of frightful flooding, well know that in such cases it is done with greater ease and dexterity than when the contracting and propelling power of the uterus is in full action. I believe there are but few accoucheurs who would have courage enough to administer a powerful anæsthetic to a patient who is already depressed and exhausted, merely for the sake of being able to turn with greater facility. I must leave the reader to decide what practical difference there is between killing a child by perforating its head in utero, or by forcibly dragging it through a distorted pelvis, which the Professor seems to have done.

I think I have said enough to prove that the operation of turning in deformity of the pelvis is calculated to hazard the life of the mother, without the slightest chance of saving the child, and therefore can never be beneficially or successfully employed as an alternative for craniotomy and the long forceps in deformity at the brim of the pelvis, &c., &c.; and if had recourse to, and the head of the child not brought down, the danger and difficulties would be increased ten-fold, as the operator would be puzzled how to pass his hand to the edge of the pelvis, in order to direct the perforator to the base of the foetal cranium. With the body of a large child lying in the vagina in such a case, the back of the child must be the only track to be followed with the perforator, in order to lessen the size of the head; but it must be a very bold obstetrician that would introduce such a deadly weapon so high up in the cavity of the pelvis with no other guide. There are other causes besides deformity of the pelvis which may require the operation of craniotomy to be performed:

great disproportion between the child's head, and the diameter of the pelvis, or a high degree of ossification of the bones of the head. This is generally found to be the case in great deformity of the pelvis, and this prevents its being moulded and adapted to the passage through which it is designed to pass, however strong the parturient efforts may be; therefore its bulk must be reduced to prevent any injurious consequences to the mother, by the ineffectual labour pains. In such cases as these I believe the long forceps would be of little use, as a large or hydrocephalous head could not be grasped by them, and in great ossification of the cranium we should not be able to compress it sufficiently to enable us to bring down the head. These long iron hands are but little use in practice, and can only be successfully applied when the head of the child has made some slight advancement into the cavity of the pelvis; but few accoucheurs, I believe, have had sufficient practice in the use of them to be able to apply them when the head is above the brim of the pelvis, so as to insure the safety of the child; and care in these cases must be taken that the puffing of the scalp is not mistaken for the advancement of the head before they are applied. Many very large children have been expelled alive by the natural efforts of the mother, through a very irregular and deformed pelvis; therefore if we should find the head of the child only partially engaged within the superior aperture of the pelvis after many hours of labour pains, we may still hope that time and nature would be able to complete her work without artificial help. All must here depend on the capability of the foetal head of adapting and moulding itself to the outlet of the pelvis; there is no other yielding power, and this moulding and adaptation will require very long and continuous uterine efforts (not only hours, but often days,) for its completion, as an alternative for the long forceps. I would recommend PATIENCE: this is a powerful auxiliary in the practice of midwifery, and in the exercise of it in these trying cases we are very often rewarded by the birth of a living child. I shall only notice auscultation by urging those practitioners who may be induced by what has been said by the Professor to use the stethoscope, in order to ascertain the life or death of the child, before they decide on performing the operation of embryotomy, that when the ear is on the stethoscope the finger should be at the wrist of the mother; for while one is listening to the pulsation of the foetal heart, it is just possible that the maternal heart may cease to act, for I believe that while the head of the foetus is above the brim of the pelvis, the one is as likely to last as long as the other, and the danger to the mother, from inflammation, will be greatly augmented in proportion to the length of time and the increased resistance of the living head, without the diminution of which there can be no chance of relieving her. Now, "delay is dangerous:" the operation of craniotomy is one that cannot in any way endanger the life of the mother, if carefully and dexterously performed, but the circumstances demanding its being done may.

In advocating the performance of the operation of craniotomy in cases of deformity of the pelvis instead of turning, as recommended to be done by Professor Simpson, I wish it to be particularly understood, that such a deadly operation should never be resorted to until the deepest consideration and deliberation had been given to the whole of the circumstances attending the case compatible with our professional duty and humanity.

I am quite sure that no accoucheur would have recourse to such a fatal operation unless urged to it by the strongest and most painful necessity; and while discharging one of the most awful and distressing obligations he can be under to a patient, he should not forget the higher moral responsibilities he is under, and that he must be fully satisfied and conscientiously feel that he has done all for his patient that art and skill can devise, before he could wilfully sacrifice the life of a child in utero.

These remarks are intended as a caution to the young accoucheur not to adopt a mode of practice recommended by Professor Simpson, in deformity of the pelvis, which can only tend to baffle and perplex him without being productive of any real good.

Hospital Reports.

WEST NORFOLK AND LYNN HOSPITAL.

COMPLICATED SURGICAL CASES UNDER THE CARE
OF CHARLES COTTON, M.D., F.R.C.S., &c.,
SENIOR-SURGEON TO THE HOSPITAL.

Case of Excision of the Head of the Thigh-bone.

Jessie Bullen, aged 12 years, admitted into the Hospital September 10th, 1849, with hopeless disease of the right hip, said to have commenced nine months ago. She is a pale delicate child, of scrofulous habit, with dark hair, bright blue eyes, long curved eyelashes, and cheeks flushed of a vivid red colour. Her intelligence, interesting expression, and desperately emaciated condition, attracted much attention and sympathy. Her father, aged 37, a tall spare man, a tailor by trade, enjoys pretty good health. She has four brothers and sisters living, one of whom is subject to eruptions. The mother, aged 33 years, and a brother, died a short time since of consumption. She lies on her back, inclined to the left side; the limbs are drawn up and contracted; and there is observed a large open sore over the right hip, which discharges thin, curdy, purulent matter. The least movement causes agonizing pain. Both ankles are excoriated and ulcerated; and there is a painful bed-sore over the ribs near the spine on the right side. The circulation is hurried, the appetite capricious, and the stomach ticklish, but there is almost an entire freedom from cough. Ordered to have cod-liver oil judiciously administered, and any agreeable

nutritious diet. Apply linseed poultice twice a-day to the hip.

28th.—Improved in appearance, and has gained flesh. The oil has been taken regularly, excepting an occasional discontinuance, owing to the stomach being deranged.

October 6th.—Renewed hectic excitement, pain, and exhaustion; loss of appetite; partial sweating and restlessness. The pitiable condition of the patient now led to a more searching examination. A large circular sore over the right hip disclosed the great trochanter, covered with florid granulations, prominently protruding, and on passing the finger through the posterior part of the opening, the head of the femur was easily reached, and found dislocated on the ilium, lying in the centre of a large abscess; the limb was drawn up and shortened; the knee rigidly flexed and immoveable, and fixed a little above and on the inner side of the opposite knee, which was also stiffly contracted, and drawn upwards and inwards. As it was evident the patient must sink, unless some operative proceeding was resorted to, and as chloroform-inhalation promised to disarm of importance any objection on the ground of pain and tediousness of the operation, the opinion of the medical staff was requested upon the propriety of attempting the relief of the poor girl by re-section of the head of the bone.

10th.—Operation sanctioned in consultation, there existing no positive indications of organic mischief, or of the disease extending to the pelvis, or beyond the upper part of the femur.

12th.—The patient having been previously rendered unconscious by the administration of chloroform, was brought into the operating room in the presence of a large attendance of professional gentlemen of the town and neighbourhood, when Mr. Cotton proceeded to make an incision through the hypertrophied and ulcerated tissues about five inches in length, commencing above the head of the bone, and terminating below the protruding trochanter. This was afterwards slightly prolonged to facilitate the sawing of the bone. The soft parts were then cautiously dissected away and separated, and the head of the femur made to project through the wound, by forcibly twisting the limb inwards. The portion of bone to be removed was then grasped firmly in the operator's left hand, and a section made by a common saw, in an oblique direction, through the great trochanter and neck of the femur. The bevelled end of the bone being in a diseased condition, the saw was again immediately applied, and a slice about a third of an inch in thickness removed, the section apparently terminating just above the lesser trochanter. The joint cavity, on examination, was found filled up with a mass of soft granulating deposit. An ineffectual attempt, owing to the friable state of the tissues, was made to secure one vessel, which at first spouted out rather freely, but no hæmorrhage of importance occurred. On the removal of the patient to bed, the limb, now set free in the hip, was brought into as good a position as the contracted knee would admit, and steadied by means of a long splint,

on the outside. Tenotomy of the hamstring tendons was left for a future proceeding should the case do well. The chloroform inhalation answered admirably; some hysterical sobbing followed its withdrawal, and the girl complained much of pain in the right knee.

Ordered Liq. Opii Sed., (Battlei) m. xv., ex Syrup. statim. Milk and toast-water diet.

13th.—Became quiet and composed towards the evening, was restless during the night, and a slight hæmorrhage took place from the wound. Has dozed much this morning, but still complains of pain at the knee, and of being cramped at the ankle. This was relieved on loosening the bandage. A slight sanguineous oozing continuing, the wound was dressed with lint moistened with a solution of matico, and the following draught was prescribed to meet irritative feverishness.

R. Liq. Ammon. Acet., dr. j.; Tinct. Hyoscy., m. x.; Vin. Ipecac., m. v.; Syr. Papav., dr. ss.; Aquæ, dr. x. Fiat haust. tertiâ vel quartâ quaque horâ sumendus.

14th.—A good night, pulse more calm, limb easy.

15th.—Another good night; no uneasiness of the limb. She is rather feverish and thirsty, pulse 120. Allow a little chicken and half-a-pint of porter.

16th and 17th.—Had rested well; tongue clean; symptomatic fever subsiding; wound discharging freely rather offensive pus. To be dressed with chloride of lime solution. Discontinue the mixture.

18th.—Though composed, and free from pain, there is slight fever and peakiness, and a disposition to diarrhoea. Has required a dose of astringent mixture. Bed very foul and offensive. The thigh appears shortened, and the end of the femur may be seen projecting within the wound, owing to the unavoidably cocked-up and contracted condition of the knee. The complete influence of chloroform having been induced, the patient was moved to an adjoining bed, and placed upon a sheet of gutta percha web; Mr. Cotton then grasping the thigh with the left hand, and the leg with the right, gradually but forcibly *straightened the limb. During the extension the integuments of the ham were torn across, and the lacerated edges drawn a finger's-breadth apart.* (Subcutaneous section of the tendons was dispensed with, as it was evident that the whole of the tissues, from long faulty position, contributed in keeping up the contracted state of the knee.) A straight Liston's splint, reaching from the axilla to beyond the foot, and previously shaped so as to admit of easy access to the hip, was now applied, and secured by a bandage to the limb, and farther steadied by a wide web belt carried round the body. All this was accomplished with but little apparent discomfort to the patient, who only whiningly complained of the knee on recovering from the effects of the chloroform. Water dressing. A well was formed to receive the discharge by placing a heavy weight on the outside of the splint near to the wound.

19th.—Easy and comfortable, and pleased with the straightness of the limb. Hopes in time to overcome the contraction of the other knee herself. The head of

the femur is well imbedded in the soft parts, and cannot now be seen in the wound.

20th.—Listless and sleepy; has eaten neither breakfast nor dinner to-day; was tempted to take some portwine and cake; the exhaustion seems attributable to the state of the bowels, which have been purged several times. If possible, engage her attention by conversation or other means. Let her have fish, game, or poultry, and wine or porter, according to her fancy; and give an ounce of the following mixture three times a-day:—R. Extr. Hæmatoxyli, dr. iss.; Syr. Aurantii, dr. vj.; Acid. Nitric. Dilut., dr. iss.; Decoct. Cinch., Aquæ Puræ, utrq., oz. vj., fiat mistura.

22nd.—Tongue moist and clean; pulse less frequent; bowels acted but twice yesterday; has relished her partridge, and taken some porter to-day; sleeps well at night, though disturbed occasionally with pain in the course of the crural nerve. Apply frequently a warm chamomile fomentation to the groin, which is slightly swollen and tender. Take the mixture but once daily.

26th.—In every respect improved; the wound looks well, and discharges freely tolerably healthy pus; has discontinued the mixture, as it disagreed; takes a pint of porter and two glasses of wine a-day.

November 1st.—Appetite good; countenance cheerful, and spirits excellent; has not been so well for months; wound decreasing in magnitude, and granulating healthily.

5th.—A trifling bleeding from the nose during the night; is altogether better. Sumat Olei Jecoris Aselli Coch. Med. j., bis quotidie.

12th.—Gradually progressing; to give up the oil, as it produces nausea; excoriated condition of the ankles healed; a small pustular abscess has shewn itself on the left knee; the bed-sore remains much the same.

19th.—The improvement in general health has continued; has no sweats at night, or cough; less running of the pulse, and the cheeks flush only when the hip is dressed; the sore in the ham, from the integuments yielding, is slowly healing. Fearing an operation upon the left knee; she, assisted by the nurse, has very much overcome the contracted condition of the limb.

24th.—Straight splint removed in consequence of ulceration of the ankle against which it pressed; limb placed on a pillow, and fixed in a cradle.

28th.—Better; limb easy; very good appetite; thinks she will soon sit up in bed; the wound, at the seat of the operation, does not now equal in size that of the sore through which the trochanter originally protruded; the edges are rounded, and skinned over; the base is hollowed, and coated with dirty yellow shreddy lymph; the discharge has much diminished. Dress with resin ointment.

December 3rd.—Can move herself in bed, and admits of being raised for a short period to a semi-upright posture with but little inconvenience; hip-wound stationary; the draining slightly increased from the ointment; bed-sore and other ulcerations healing; the limb lies extended upon a pillow, loosely supported

by foot-splints; the left knee still remains much contracted.*

The portions of bone removed measured, (by a tape drawn from the point of insertion of the round ligament to the upper edge of section,) over the head, curve of neck, and great trochanter, four inches and three-quarters; and from similar points below two inches and a half. The head of the bone was denuded of cartilage, and a carious cavity, admitting the end of the finger, existed at its under surface; the under part of the neck was also softened and damaged by caries. The trochanter and remaining shell of the bone retained a seemingly healthy firmness. The cancellous structure was filled with pale yellow lardaceous pus.

REMARKS.—The propriety of resecting the head of the thigh bone, *in advanced disease of the hip complicated with dislocation*, practised first in this country by Mr. White in 1822, and revived by Professor Fergusson in 1845, and since recommended by that eminent authority, has been the subject of much discussion, and various strong protests and objections urged against the operation have been most ably met and commented upon by Mr. Henry Smith, who has frequently directed the attention of the profession to the particular circumstances which render a resort to excision not only justifiable, but a *duty*. The details of the above interesting case *may possibly aid* in disarming of influence the sweeping and strongly expressed unfavourable opinions which have been hastily promulgated: for although in its present stage no confident prediction of permanent benefit can be hazarded, nevertheless, an auspicious commencement, and upwards of seven weeks progressive amelioration, create a hope that the constitutionally-depraved condition of the system may in a degree expend itself through the outlet still existing at the hip, and the skin ulcerations resulting from long pressure be obviated, by the further favourable progress of the case allowing of a more frequent change of position. But whatever the termination—*temporarily amended health only*, protracted disease, or death from phthisis—it must be conceded that the operation, severe and formidable as it may appear, has, at least in this instance, given a chance of life, and afforded marked comfort and relief to a helplessly-deformed girl, who, harassed by pain, and worn down by slow and wasting hectic, must, had she survived, have remained in a crippled and pitiable condition to the end of her life.

Lynn, December 3, 1849.

* [At the time of going to press the patient is still going on favourably; in our next number we hope to be able to give a good account of this interesting case. Mr. Cotton deserves the thanks of the profession for publishing it while still uncertain in its results.—ED. JOURNAL.]

Provincial Medical & Surgical Journal.

WEDNESDAY, DECEMBER 12, 1849.

WE regret to find—as appears from a letter inserted at a further page—that our remarks on the “fungoid” theory of cholera have given umbrage to a member of the Cholera Committee of the Bristol Microscopic Society; but in our own vindication we feel it necessary to assure that gentleman and our readers in general, that our observations were intended to be such as might be expected of us as impartial commentators on passing events, and that nothing was further from our minds than, as is insinuated by the writer of the letter alluded to, to “discourage the efforts of the Bristol Committee or to exalt the researches of the College of Physicians at their expense.

So far, indeed, from discouraging the interesting labours of Messrs. Brittan and Swayne, we appeal to our leading article of October 17, as evidence that, entertaining as we did, a doubt as to the correctness of the “fungoid” theory, we said all that could be anticipated in commendation of researches which, whether true or false, in reference to the conclusions drawn from them, were admitted by us to be honestly and candidly conducted. Our words were, “we would in the mean time congratulate Mr. Brittan on having struck upon a track which may probably lead to results of incalculable importance, and we trust that there are among the members of this Association, many who are both able and willing to aid him in his investigations.” Surely this is not discouragement.

In taking a view unfavourable to the “fungoid” theory of cholera, we claim for ourselves that independence of judgment, which our Editorial position should rather add to, than diminish, and we need not inform the writer of the letter that in that opinion we are by no means singular. The opinion we still maintain, and we believe, in the present state of knowledge, justly. Glad shall we be, if eventually the discoveries of Messrs. Brittan and Swayne be proved to be truths, to avow our error, and most proud to think, that to this Association human nature is mainly indebted for the announcement of the cause of the most deadly pestilence of modern times.

The writer of the letter in question affirms

that our statements are absolutely incorrect, in saying "that bodies identical in appearance were found in other secretions, and in other diseases, and when present in cholera stools were seen not to be so on their first dejection," &c. In reply to this we beg to refer him to the letter of Dr. Jenner (Report of the Cholera Committee of the College of Physicians) who distinctly states that "on examining microscopically, four alkaline stools, passed at different stages of *typhoid fever*, I found in them bodies which appeared to me identical with those described and figured by the Bristol Committee." And again, we invite his attention to a paper by Dr. Basham, (*Medical Gazette*, October 19,) in which he states that he has found cholera cells in the urine of dyspeptic patients; and further, that in several specimens of cholera stools, these cells were not present on the first evacuation, but appeared after the lapse of some hours.

There is one other part of the letter which calls for notice, viz., the remark that "such a statement proves the anomaly of having irresponsible Editorial articles in a journal the *property* of a particular class of men." If we rightly understand this passage, it would imply that the Editors of this journal are to have no opinion of their own, but are to be subservient to the *proprietary* in every view they may express. We venture to hope that such an opinion is not prevalent in the Association, for we respectfully submit, that, to say nothing of the well-known fate of those who try to please everybody, to be thus shackled would utterly annihilate the usefulness of the Editorial function. We most emphatically disclaim the writer's insinuation that we have favoured metropolitan scientific efforts, and discountenanced those of the provinces. We take no special interest either in the metropolis or in the College of Physicians, and we do, on the contrary, most cordially sympathize with the provincial portion of the profession in everything which affects its interests and honour; but at the same time we are confident that we should not earn the approval of the Provincial Medical and Surgical Association, by supporting against our conviction any doctrine solely because it emanates from one of its members, or by refusing to acknowledge the merits of those who are not included within its ranks.

In conclusion we repeat, that in expressing the opinion we have done on the subject in dispute, we have been actuated solely by the wish to do

what is right: we have neither favouritism nor antipathies. We shall be only too glad to find ourselves mistaken, and that so simple an explanation of the origin of cholera shall be the correct one, and be owing, moreover, to the energy and talent of members of our Association.

Reviews.

First Annual Report of the Hospital for Consumption and Diseases of the Chest. By THE PHYSICIANS OF THE INSTITUTION. London: Churchill. 1849. pp. 42.

HAVING taken an active part in the original establishment of this noble Institution, it is with peculiar satisfaction that we have the opportunity of perusing this, the first Report of its operations. It is, on the whole, a most valuable statistical document, and is well calculated to enhance the reputation for close and accurate observation, which its compilers are known to possess.

There are some, we are aware, who doubt the wisdom of placing consumptive patients in the wards of a hospital, and we have recently seen objections to the plan, based, however, as we believe, upon erroneous premises. An inspection of the admirable arrangements in the establishment from which the present Report is taken, would, we are assured, materially modify such opinions. The hospital is a splendid building, specially erected for the purpose, and every means which science can suggest as applicable to the hygienic and medical treatment of tubercular disease has been scrupulously carried out. Not the least of these admirable arrangements, is the adoption of a plan of ventilation suggested by Dr. Arnott, by means of which the temperature of the most genial climate is combined with the free supply of pure air. The comfort which this affords to the majority of the inmates is mentioned in the Report.

The information comprised in this document is distributed under three heads:—1. The number of patients treated, and the facts of their history which have reference to the origin and progress of the disease. 2. Some of the principal signs and symptoms of phthisis. 3. The duration of the disease, and the results of treatment. On each of these points we shall give copious extracts.

The total number of cases of phthisis comprised in the Report is 4358, of which 888 were in, and 3470 out-patients.

In reference to sex, the experience of the Institution is not in accordance with general observation, the result of which is, that the female sex is more liable to the

disease than the male. Here the reverse obtains, the males constituting 61 per cent. That this is in reality the correct statement, rather than that more generally entertained, is countenanced by the mortality tables of the Registrar-General.

From a table having reference to the point, it would appear that the age most liable to phthisis in both sexes, is that between 25 and 35 years. Under the age of 25 the liability is greater in females than in males; the reverse being the case after 35.

Regarding hereditary predisposition, the reporters have elicited some curious facts. For instance, they have found that females inherit the disease in larger proportion than males; of the former, thirty-five per cent. could trace their disease to consumptive parents; of the latter only eighteen per cent. gave the same information. It also appears that sons inherit the disease from the father more frequently than daughters, while mothers, on the contrary, transmit it more commonly to the female children. Similar results, as the reporters notice, have been observed with respect to the transmission of insanity.

The spirometer has proved of much service in the diagnosis of phthisis at this hospital, and the reporters speak highly of its results in cases in which auscultation fails to reveal the presence of tubercles.

In speaking of particular symptoms, the authors of the report justly give great consideration to hæmoptysis. This symptom was inquired into in 1,381 cases, with the result of ascertaining that it was present in one or other stage of the disease in sixty-three per cent. Sex had but little influence in reference to the occurrence of spitting of blood, though, as a matter of course, some difference exists as to its import in certain cases. As the authors remark, the fact that sex appears to have so little influence show the paramount agency of tubercular disease in giving rise to this symptom.

The stage of the disease at which hæmoptysis occurred was noticed in 696 cases, and it appears that it is a symptom more frequent before than after softening, in the proportion of three to one. The explanation of this fact favoured by the authors is, that in the first stage the blood-vessels are subjected to the irritating influence of the deposited matter; they are then liable to partial compression and congestion, and it is easy to suppose that under these circumstances blood may be extravasated. At a later period of the disease it is supposed that the blood-vessels become blocked up or obliterated, and that any hæmorrhage then is rather to be attributed to fresh deposit than to ulceration of vessels connected with cavities.

On the subject of treatment and the duration of the disease, the authors' observations are both important and encouraging. In reference to this part of the inquiry, the patients are classed according to the amount of benefit received. By the term *relieved* the

report implies the diminution of the more distressing symptoms while the patient remained under observation; by *much relieved* is meant the removal of the principal symptoms, the patient still remaining delicate. The term *arrest* implies that all symptoms of the disease have disappeared, and the patients have returned to their occupations. It appears from the tables that nearly one-half of the patients, both males and females, who seek relief in the first stage, obtain it to a limited extent; about forty per cent. are materially relieved; and in about twelve per cent. males, and near seven per cent. of females, the disease is to all appearance arrested.

In the second stage it is found that about 60 per cent. experience a mitigation of their more urgent symptoms: as might be expected, few instances of *arrest* of disease are noticed.

In the third stage, relief is obtained in about 25 per cent., and, in addition, another 28 per cent. are materially benefitted. The cases of arrest amount only to 3 per cent. for males, and 4 per cent. for females. Viewing these results collectively, we find that in 6 per cent. the disease is arrested; while relief is obtained to a greater or less extent in 60 per cent.

After a brief account of the local advantages enjoyed by the Institution, and the internal sanitary arrangements to which we have already alluded, the reporters proceed to notice a few of the more usual therapeutic resources. Of these,—

Naphtha was not found to have any effect in ameliorating tubercular disease, though it seemed occasionally to be useful in bronchitis with profuse secretion. *Iron* was useful in the earlier stages, but failed in inducing any material improvement at subsequent periods.

Cod-liver Oil.—"This substance" the authors remark, "is deserving of special notice, as having been productive of more good in the treatment of phthisis than any other agent yet employed." This satisfactory announcement is, as will be seen, amply borne out by the succeeding details.

Of 542 cases in which the oil was exhibited, 293 were in the first stage of the malady, and 249 in the second and third: of the first class 190 were males, and 103 females. Of the males, 72 per cent., and of the females, 62 per cent., had their symptoms materially improved; in nearly 18 per cent. of the males, and in 28 per cent. of the females, the disease was arrested. In the second class 139 were males, and 110 females. Of these, improvement occurred in 53 and 61 per cent. respectively, and in 14 per cent. the disease was arrested.

This most important evidence is received by us with peculiar pleasure, as it entirely supports the view of the therapeutic power of cod-liver oil, derived from a tolerably extensive private experience, and we trust that the accumulated experience of the profession which we

are earnestly endeavouring to acquire, will still further strengthen us in our confidence.

There are many of our medical brethren who are unacquainted practically with the effects of cod-liver oil, and there are not a few who affect to ridicule the idea of its possessing any virtue; it is to be hoped that after the evidence here so honestly adduced, they may be inclined to experiment a little, for their own enlightenment, and their patients' welfare.

In exhibiting the oil, we would, however, caution our readers, that the quantity of spurious oil in the market is enormous, and that, wherever it is in their power, they should obtain it from some manufacturing chemist, in whose rectitude they have implicit confidence. For our own parts, the many instances in which we have met with adulterated samples, even from sources which should be unimpeachable, have induced us to place little confidence in any oil, the manufacturers of which we do not personally know.

In conclusion we express, we are assured, the general feeling of the profession, in thanking the Physicians of the Hospital for Consumption for their well-timed and most gratifying Report.

INQUIRY ON CHOLERA.

PROPOSED PLAN OF PROCEDURE—FIRST FRUITS.

By THOMAS HUNT, Esq.

In the prosecution of this important inquiry, it appears highly desirable that ultimately a condensed analysis or digest of the experience of the whole Association, so far as it can be obtained, should be presented to the members; this should indicate, in as clear, and pointed, and concise a manner as possible, what has been demonstrated by the inquiry. The results may thus be collected as rays of light into a focus, so that each member may, without the toil of reading a wearisome essay, be presented with a view of what is practically known by the Association of the cholera. This is the main object sought by the Council in setting the inquiry on foot. If no new discovery be elicited, much good may yet be done by dissipating the false views, and exposing the hasty conclusions, which have mystified the subject. But it is plain that the chief excellence of such an abstract, namely, its brevity, will necessarily exclude from it much that is interesting in the correspondence, consisting of isolated cases and local facts, as well as original observations, ingenious theories, bright thoughts, and happy conjectures, the records of which are too valuable to be lost; it is therefore proposed, as long as the inquiry is open, to insert from time to time, a short paper in the *Journal*, containing such extracts from the correspondence as shall appear to possess peculiar interest, as well as such

reports of the progress of the investigation as shall direct the attention of the members to points of inquiry which might possibly be otherwise overlooked.

As a specimen of the plan, the following notices are subjoined:—

1. Dr. Tunstall, of Bath, (who, as being the first in order of time to contribute a report, is entitled to the first notice,) relates, that in the epidemic of 1832 he remembers to have observed, that all the females between the ages respectively of 15 and 45 who suffered from the cholera, were attacked just as the catamenia appeared. It would be interesting to know whether this has been observed by other practitioners. He likewise considers the exemption of the Bath Hospital from the late visitation to have been, in some degree, promoted by the prophylactic measures adopted, among which he mentions immediate attention to the first symptoms of diarrhoea, the patient being sent to bed, kept warm, and taking a mixture of chalk, aromatics, and opium. Before the attack, if patients required purgatives, they were administered with unusual caution, the milder kinds, such as castor oil and rhubarb, being substituted for colocynth, salts, and "house physic." He was confirmed in this by observing that patients taking cod-liver oil or quinine, conjoined with iron, and other remedies not usually purgative, were more liable to diarrhoea than others. The exercise of the patients was limited to a certain boundary line, to separate them from the effluvia of drains, &c.

2. Mr. Conway Edwards, of Batheaston, so far from agreeing with Dr. Tunstall in the necessity of dealing tenderly with the bowels, relies chiefly on drastic purgatives, and forwards a tract embodying his views, entitled, "The Purgative Treatment of Spasmodic Cholera." He endeavours to show that "no just confidence can be placed in any treatment but what clears the stomach and alimentary canal of offensive and acrid secretions, subdues nervous irritation, and, lastly, gives tone and energy to the system." He accordingly condemns the primary exhibition of opiates, wine, brandy, ammonia, chalk, catechu, and logwood, and treats his cases, with calomel, jalap, scammony, and Epsom salts, with perfect stillness in bed; then a combination of opium, chloroform, and camphor, with a diet of milk-porridge, mint julep, and rice-water, applying hot moist bran bags, wrung out nearly dry, to the back, stomach, and legs. Having been accustomed to treat in this way a severe form of diarrhoea which annually breaks out in his neighbourhood in the cider season, he resolved to try the plan in cholera, and has not lost a single case, nor seen an instance in which the severest forms of vomiting and purging were not arrested by it. He does not, however, mention more than thirty cases of cholera thus treated, and of these, the type appears to have been of remarkably mild character, occurring in a healthy district, in elevated sites, over the freestone formations, in absence of grave-yards, and (except in one instance) other sources of putrefaction, without evidence of contagion or symptoms of collapse. This plan of treatment, therefore, has not, in Mr. Edwards's experience, been subjected to any severe or satisfactory test; but the theory on which it is founded, (relieving the alimentary canal by removing offensive secretions instead of shutting them up,) is rational, and has been

found extensively applicable to cases of diarrhoea from primary intestinal irritation; but whether it be equally applicable to epidemic visitations in their severer forms, and in low and ill-drained districts, or whether drastic purgatives would not rather tend to hurry on the stage of collapse in cases where the type is low, remains to be proved. Mr. Edwards regards his treatment as a modification of Dr. Ayre's, or rather as an improvement upon it, and attributes the success of the calomel treatment to the same principle—the riddance of offensive matter.

3. Dr. Lingen, of Hereford, reports that his own locality has been entirely exempt from cholera, not only in the recent visitation, but likewise in that of 1832, and that he cannot satisfactorily account for the exemption. He mentions two or three circumstances, namely, "the over-abundance of vegetation in the county, the free use of cider, and the almost contemptuous disregard of ventilation and sewerage," as conditions which, one would say, *a priori*, were highly calculated to invite and retain the scourge. The locality is on the "old red-sandstone," with lime here and there; a clayey soil interspersed with gravel. The writer concludes with an observation worthy of note, viz.: "It may be, that so far from cider being productive of such a disease, it tends to keep the system in good order. I am highly impressed that it is a wholesome drink, less adulterated, and consequently less harmful than beer." This suggestion opens a field of inquiry full of interest. It is a prevalent opinion that a strict abstinence from fruits, acid drinks, and even vegetables, renders the system less susceptible of choleraic influences. Is it so?—or is the contrary true? Dr. Lingen suspects that the whole county of Hereford has been also exempt, excepting a few border cases, and some imported from a distance. We shall now look with anxiety for the reports of the members residing, not only in Herefordshire, but in Devonshire and other counties where cider is the staple beverage. And it is worthy of inquiry, whether persons who have refrained from acid drinks and wholesome fruits, during the epidemic, have enjoyed any marked immunity from the cholera, or whether they have not, in some cases, been the first or the only victims in a family or household. This question is invested with double importance, from the fact, that the prophylactic treatment of cholera is the only treatment upon which the profession appears at present likely to agree.

The above notices are all that can be gleaned of peculiar interest from the few replies yet received. The rest are valuable as statistical documents, but contain nothing unusual. It is hoped that before another week has elapsed the responses of the members will flow in more rapidly; and it is earnestly requested that *all the reports may be forwarded before the first of January next*. It is publicly known that this inquiry is set on foot; but the whole body must put their hand to the work, or little will be done; and it will be asked,—“What has the Provincial Association accomplished, with all its powers and advantages, to elucidate the pathology and treatment of the cholera?”

Bedford Square, Dec 6, 1849.

Foreign Department.

BARTHEZ AND RILLIET ON THE CEREBRAL DISEASES OF INFANCY.*

Translated for the Provincial Medical and Surgical Journal.

By E. COPEMAN, M.D., NORWICH.

Hypertrophy and Induration of the Brain.

The anatomical characters of the disease described under the name of cerebral hypertrophy, are in some respects identical with those assigned by certain physicians to general induration of the brain; and it is difficult to separate these pathological conditions into two distinct maladies. Increased density of the cerebral mass is the principal and most appreciable phenomenon, and this is common to both affections; the only difference between them is, that in hypertrophy, the increase in the size of the brain is very apparent; whilst, in general induration, it is scarcely perceptible. There is a manifest increase of consistence in the encephalic mass, but it varies much in degree. In the first degree the tissue is firm and slightly elastic; the brain may be separated into fine layers, and has a similar consistence to that which it acquires after being macerated in alcohol; the grey substance generally loses its colour, and the white has an unusually brilliant appearance. In a more advanced degree, the cerebral substance offers resistance to the scalpel, and is not broken down without considerable pressure. In a still more advanced stage, the brain becomes elastic and has acquired a firmer consistence.

When manifest hypertrophy is combined with the condition just described, the brain offers a peculiar appearance; its size and weight are sometimes considerably increased, filling accurately the cavity of the cranium; the membranes are tense and in close contact with the convolutions, which are flattened and project as soon as the membranes are divided; the anfractuosities are almost obliterated, the ventricles almost effaced and containing no fluid, and the membranes are in some cases pale, in others injected. Neither inflammation of the arachnoid or pia mater, nor tubercles, were in any case observed.

It is impossible to determine clearly what are the symptoms of hypertrophy of the brain, from the paucity and heterogeneous nature of the materials at command. The following observations will, however, throw some light upon the subject:—

1. In one form the disease is primary and occasioned by the poison of lead. (Papavaine.) A general feeling of illness is followed by pain in the body, copious green vomiting, with or without diarrhoea, headach, or severe abdominal pain. These symptoms are speedily followed by violent convulsions and loss of consciousness. As the disease progresses, we observe alternate convulsions

and coma, dilatation of the pupils, contractions of the limbs, coma, and death. Febrile symptoms make their appearance only towards the close of the disease, which lasts about four or five days. After death we find hypertrophy and induration.

2. In another form the disease is also primary, but may be traced back to a distant period, perhaps even to birth. It is attended with considerable increase in the size of the head, similar to that which takes place in hydrocephalus. Thus, a boy five years of age had a head as large as an adult, and so heavy as to cause him to fall when attempting to run. After a time, cerebral symptoms, variable in nature and intensity, appeared, and sooner or later terminated in death. In another case, severe convulsions, followed by loss of sight and diarrhoea, marked the commencement of acute symptoms. At the end of a fortnight, the eyes were restless and without expression, the pupils contracted and turned upwards; strabismus divergens in the left eye; all the senses except that of sight in a natural state, and the movements of the limbs under the control of the will. For a month there was no perceptible alteration; then debility, somnolency, and irresolution supervened; five weeks later the drowsiness was increased, signs of double pneumonia were discovered, and the child died. Another patient was seized with inflammation of the bowels at the age of five years. On the sixteenth day a sudden increase of the symptoms took place without any evident cause; the intellectual functions were completely obscured; the pupil large but the iris still sensitive; respiration became difficult, the pulse diminished in force and frequency, and in a few hours the child died. Considerable hypertrophy of the brain, with more or less induration, was discovered after death.

3. In a third form, the symptoms were those of idiocy; and induration without hypertrophy was discovered after death.

4. In a fourth form the disease is secondary, and becomes developed during the progress of different affections; such as typhus fever, myelitis, and diseases attended with very severe pain. In these cases there were no symptoms diagnostic of induration of the brain, but the patients had delirium, or suffered extremely acute pain; and the examination after death discovered induration in the first degree, without hypertrophy.

The following is a remarkable case of hypertrophy of the convolutions, accompanied with corrosion of the cranium:—A boy, two years old. First attack of convulsions three months before death, and just previously to the latter event, a second attack, followed by coma, strabismus, and paralysis of the muscles of the neck. *Autopsy*: Head narrow before and behind, wide in the parietal region, and projecting very much at the sinciput; the fontanelles ossified; parietes of the skull of variable thickness, in some places very thin, and even perforated, in others thick; convolutions of the brain prominent, pressing forcibly against the depressions in the bone, and in two places perforating them; the brain generally flabby, and the convolutions soft; grey matter of a deep red colour, the white also of a reddish

tint, and dotted; two spoonfuls of serum in each ventricle, the walls of which were softened; dura mater of a violet colour; arachnoid smooth, transparent; pia mater very thin, minutely injected, and adherent to the convolutions; the vessels filled with blood.

The following case of *partial* induration of the brain occurred in a scrofulous child eleven years of age:—There were no other symptoms of cerebral disease than slight contraction of the upper extremities, which were painful when attempts were made to extend them. *Autopsy*: Pia mater not injected; plentiful sub-arachnoid infiltration; membranes easily detached; grey substance pale, white, not dotted; on the inner surface of the left hemisphere along the great fissure, there was one convolution much firmer than the rest, particularly in its centre, where it was red; the redness was circumscribed, and here the cerebral substance was of the consistence of membrane; some transparent serum was contained in the ventricles, the parietes of which were in a natural state, and the rest of the brain very firm.

Hydrocephalus, or rather hydrancephalus, is introduced under the head of dropsies. It may have its seat either in the arachnoid, ventricles, or pia mater; or the brain itself may be infiltrated with serum. It is difficult to determine what quantity of fluid so situated may be sufficient to constitute disease; and with respect to dropsy of the pia mater, it has no distinct symptoms, is followed by no ill consequences, and requires no treatment.

Dropsy of the ventricles is admitted to exist as a disease when the quantity of fluid they contained is sufficiently visible to distend their cavity; when there is not fluid sufficient to produce this effect, the quantity is considered normal, or at all events not enough to constitute disease.

In *oedema of the brain*, the fluid is not extravasated in the form of a collection, but is infiltrated into the tissue, which it softens without altering its opaque-white colour. It is supposed that frequently it takes place after death, although occasionally it is no doubt the product of disease. The liquid infiltrated or effused in pure hydrocephalus is generally limpid, transparent, and clear; not coagulable by heat, containing but little, if any, albumen; nor has it any product of inflammation mixed with it. But the disease may result from a former extravasation of blood, in which case the fluid retains something of its original character, being serous, citron coloured, albuminous, and turbid or mixed with blood.

Acute Hydrocephalus.

This disease is of rare occurrence, and consists in a rapid, but non-inflammatory accumulation of serosity in the cranial cavities, or in the substance of the brain. The membranes, although generally pale and of a healthy colour, are sometimes injected, and thus establish a transition from simple dropsy to that which results from inflammation. The substance of the brain is healthy, or perhaps slightly congested, and some-

times softened where it is in contact with the fluid. It is extremely difficult to determine what are the symptoms which indicate the disease now under consideration; the principal appear to be extreme restlessness, cries, or rather continual groans, superseded shortly before death by great prostration, loss of consciousness, coma, dilated pupils, and paralysis. But in some cases these are not all present, and in others they have all been absent, and the disease been discovered only after death. It is very rarely an idiopathic affection, although frequently a consequence of other diseases, particularly of such as are complicated with anasarca—as measles, nephritis, scarlatina, gangrene, and enterocolitis. Age appears to have considerable influence in the production of this complication, for in thirteen children one only was upwards of six years of age; but either sex was equally liable to it.

The chapter on chronic hydrocephalus contains a good description of the disease, but offers nothing of novelty or usefulness which is not to be found in other writers. From the dependence, generally, of the dropsy on some other disease of the brain, such as tumour, tubercles, extravasation of blood, &c., a very unfavourable prognosis is drawn, and but little is recommended in the way of treatment that promises a hope of success.

Cerebral Hæmorrhage.

Hæmorrhage may occur either in the scalp, under the pericranium, between the cranium and dura mater, between the latter and the arachnoid, in the cavity of the arachnoid, in the meshes of the pia mater, in the substance of the brain, or into the ventricles. Hæmorrhage into the pericranium and dura mater, are of little diagnostic or therapeutic importance, but hæmorrhage of the arachnoid is a more serious affection, and may arise—1st, from extravasation, in consequence of fracture or rupture of vessels; 2nd, from exhalation; 3rd, from disease of the arachnoid, the second being the only source from which we have observed it to arise in children. The symptoms of arachnoidean hæmorrhage are exceedingly obscure, and frequently confounded with those of other cerebral diseases. A boy, two years old, was attacked with convulsions for five weeks before his death, which recurred every day, lasting ten minutes or a quarter of an hour. A week before he died they became more frequent; in the intervals there was considerable perspiration on the head, the feet and legs being cold; two days before death there was pain in the head, and free epistaxis. There was diarrhoea during the whole course of the disease. The only morbid appearance discovered after death was extravasation of blood in the arachnoid, so that the convulsions could be attributable only to the presence of the clot.

Hæmorrhage of the pia mater is less frequent in children than that of the arachnoid. M. Tonnellé gives the following case:—"The dura mater was much distended, and a thick dense layer of coagulated blood, of a deep colour, was extravasated under the arachnoid at the upper part of each hemisphere. The veins

ramifying upon the upper surface of the brain were distended with clotted blood, and some had given way at several points. The following symptoms were observed:—On the first day, depression, unwonted seriousness of manner at intervals, with some convulsive movements. Next day the trunk and lower limbs were rigid; deglutition difficult; pupils fully dilated and immovable; face pallid; pulse feeble and intermitting; death soon followed." The substance of the brain was healthy.

Cerebral hæmorrhage, or hæmorrhage into the substance of the brain, although of frequent occurrence in old people, loses much of its importance when it occurs in children. It is seldom a primary disease, is generally of small extent, and scarcely ever occurs except just before death or in the course of some otherwise incurable disease. It is then sometimes completely latent, discoverable only after death, and the practitioner is unable to recognise it. The symptoms which have been noticed throw no light upon the diagnosis of the disease, and are quite different to those assigned by authors to apoplexy; and as if everything conspired to render the diagnosis obscure, cases have occurred in which most of the symptoms of apoplexy were present, and yet no extravasation was found after death. The symptoms may generally be referred to one or other of the following types, viz., convulsive inflammatory, or paralytic, the first belongs more especially to meningeal apoplexy, the second to cerebral hæmorrhage.

The causes of hæmorrhage in the head are,—

1. Improper treatment of diseases of the scalp.
2. Diseases of the sinuses of the dura mater.
3. Compression of the superior vena cava by enlarged bronchial glands.
4. Pressure on the vessels by hypertrophy of the liver or spleen.
5. Cachexia and general debility, usually connected with tuberculization.
6. Occasionally the hæmorrhage is primary, and not dependant upon previous disease.

Meningeal hæmorrhage is most frequent in children of the age of from one to two and half years; whilst cerebral and ventricular hæmorrhage are rare at this early age, and more frequent at a more advanced period of life. Sex appears to exert little or no influence.

The prognosis is very unfavourable, and it is difficult to arrive at any reasonable mode of treatment, owing to the uncertainty of diagnosis. Nevertheless, when the disease is chronic, occupying the arachnoidean cavity, and causing an increase in the size of the head similar in appearance to chronic hydrocephalus, the operation of making a puncture to evacuate the fluid is more likely to be successful than in the latter disease.

In the acute form, the treatment consists in bleeding, cold applications to the shorn head, purgatives (especially calomel) and purgative injections, warm pediluvia, sinapisms, blisters, and a general antiphlogistic regimen. In the chronic form, M. Legendre advises salivation, purgatives, diuretics, and compression.

(To be continued.)

ABSTRACT OF THE PROCEEDINGS OF THE FRENCH ACADEMIES.

ACADEMIE DE MEDECINE.

The Academy has received numerous communications on *cholera*, the majority of which, like many of the scribbles on the subject in the country, may be pronounced to be, in a scientific point of view, utterly worthless; we do not in fact find a single memoir worthy of transfer to our pages.

One of the essays which has excited a large share of attention among the members of this academy is that by M. Robert, "On the Dangers of Chloroform." The author's object in this memoir is chiefly to ascertain if there are any signs by which it may be, *a priori*, known that anæsthesia will be accompanied with danger in a given case. Such, he thinks, will be found in those persons on whom inhalation produces great delirium and agitation prior to the occurrence of insensibility. In such he believes that the attempt to force insensibility will frequently be attended with fatal results.

In illustration of this he narrates the case of a powerful man, of very intemperate habits, who became the subject of strangulated hernia. After two days incarceration with stercoraceous vomiting, chloroform was inhaled to assist in the taxis, but it produced the most violent delirium and struggling; inhalation was, however, persisted in, and insensibility took place after half an hour. It was then found that the operation was required, and it was accordingly performed, but the intestine could not be liberated, and was opened, as the only means of saving life. The man remained calm after the operation, but died unexpectedly next day.

This case, which M. Robert regarded as an instance of the fatal effects of chloroform, gave rise to an animated discussion, in which Velpeau, Roux, Rochoux, Gaultier de Claubry, &c., took part. M. Velpeau opposed the view taken by M. Robert, that death ensued from the inhalation, and narrated several instances of sudden death after operations previously to the introduction of chloroform. He also made some useful practical observations respecting the various instruments and appliances used for inhalation.

M. Hutin, Senior-Surgeon of the Invalides, presented a specimen of injury of the spinal marrow. The case was that of a soldier who received a musket ball in the site of the two lower lumbar vertebræ. The wound was immediately followed by paraplegia, and healed without extraction of the ball. In the course of time the paralysis of the left leg disappeared, but the loss of power over the right limb was permanently lost. The functions of the bladder and rectum were intact. After the patient's death, which occurred at the end of fourteen years, from disease of the kidney, the ball was found implanted in the vertebral canal, having divided the right side of the cauda equina, the left half being only displaced.

Some other communications were presented, which we pass by as of trifling interest.

ACADEMIE DES SCIENCES.

The most interesting paper read at this Society during the past month, was one by M. Levas, "On the Effect of the Gastric Juice on the Medicinal Preparations of Iron." The result of his inquiries is in favour of the therapeutic efficacy of the double salts of iron, as the potassio tartrate, &c.

SOCIÉTÉ DE CHIRURGIE.

M. Morel Lavalée presented to the Society a man who was remarkable for the number and symmetrical arrangement of *exostoses* on different parts of the body. The development of these growths commenced at the age of twelve, without any obvious cause, and occupied almost every bone near the surface. The patient was otherwise in good health.

Memoirs were also presented by M. Vidal "On the Effects of Syphilis upon Virility;" by M. Michou "On Electricity in Paralysis of the Bladder;" and by M. Morel Lavalée "On a Case of Neuroma of the Median Nerve."

On the Occurrence of Intercostal Neuralgia during the Course of Phthisis.—M. Beau endeavoured in a former memoir to establish that pleuritis and pleuropneumonia are generally accompanied by an inflammatory affection of the intercostal nerves, to which the pain or *stitch* is mainly attributable. He has since perceived that the same species of neuritis is also present in phthisis. Tubercles, as is well known, invade the upper lobes of the lungs, and give rise to attacks of inflammation, which extend, according to him, from the serous membrane to the nerves adjacent. This he has verified by inspection of the nerves after death, finding them enlarged and adherent to the pleura. The nerves generally affected are the first, second, and third.—*Archives Générales*, Oct., 1849.

General Retrospect.

SURGERY.

On an Unusual Affection of the Penis.

By J. KIRBY, L.L.D., F.R.C.S.I.

Mr. C., a hale, active, stout person of 50, for many years a great sufferer from gout in his extremities, but from which he has been usually free for the last few months, consulted the writer under the following circumstances:—For two years he remarked a progressive diminution in the size of the penis during erection, at the same time observing that it was deformed and so contorted as to be unfit for sexual purposes. He informed him that under excitement the glans never swells with more than half its natural turgescence. The corpora cavernosa are preternaturally firm, while the corpus spongiosum exhibits its accustomed pliancy. A very unyielding substance supplies the place of the suspen-

sory ligament and stretches in a tapering manner along the dorsum penis nearly to the corona glandis, where it is gradually lost in the subjacent structure. At the pubic attachment it is studded with pisiform bodies which seem set into its substance. Beneath this the penis is invested by a broad elastic lamina of an apparently cartilaginous nature, admitting of a doubtful degree of gliding motion. Similar plates of smaller magnitude are ranged along its sides, and are thoroughly incorporated with the fibrous tissue they surround. There is no urinary impediment, the health is at present very good, and it appears that the disease invaded and became confirmed without any accompanying pain.

Mr. —, a slender unhealthy man, of 45, came under the author's care in consequence of urethral stricture, from which he had long suffered, with all its harassing attendants—frequent retention, urinary irritation, and its characteristic fever. During the author's attendance he adverted to a growing reduction in the dimension of the penis, which he had previously remarked to be unusually small. On particular examination, the whole organ was found to be unusually firm, the component bodies feeling as if they were solid cords. Flakes, seemingly cartilaginous, loosely surround the upper and lateral surfaces of the penis, and are somewhat moveable in their own plane. These bodies vary in size, the largest lying nearest to the pubis.

As sexual desire was long dormant, he could not give any account of appearances during erection.

Mr. B—, a very temperate person of 50 years of age, and with a strongly marked gouty diathesis, but perfectly free from every form of urinary disease, asked for advice in consequence of increasing impotency. For some time he observed a very perceptible falling off in the dimension of the penis, whether flaccid or sexually distended, in which case he says "it becomes ridiculously distorted."

Two meniscoid bodies, separated from each by an interval of a line, lie on the upper and lateral surfaces of the penis, the crura of which are very much firmer than is natural, while the glands and corpus spongiosum are decidedly much advanced in atrophy.

Mr. —, now upwards of 60, and of an intensely gouty constitution, in part hereditary, and in part acquired by generous living, studious and sedentary habits, rather than by intemperate indulgence, and who from time to time had suffered almost every form of his long besetting disease, being year after year troubled by a severe cough, was attracted by a sharp occasional pain in the right groin, accompanied by a sickening sensation, which was renewed by almost every severe pulmonary exertion. Fearing the formation of a rupture, he examined himself with care, and then discovered a painful hardness at each side of the penis, and close to the pubis, from which he perceived his distressing uneasiness to proceed. Satisfied on the subject of the apprehended rupture, he paid no attention to the other matters for some months, when he perceived an abatement of sexual propensity, a slowness and weakness of erection, and a great diminution of the wonted dimension of the virile member, which

now scarcely exceeds half the natural size. He informs me that during tension it is variously contorted, the body of the penis pointing downwards, while the faded glans, and the extremity to which it is fixed, are turned upwards to an obtuse angle, largely impeding, but not wholly preventing, coition.

The suspensory ligament seems composed of a number of cords, studded with many small round moveable deposits. From each side of the pubis internal to the abdominal rings, a firm band extends along the sides of the penis to the prepuce, in which it is gradually lost. This is also the seat of many pisiform bodies, which elude the grasping pressure of the fingers. The body of the penis is encased by several thin, square, rather elastic laminae, distinct from each other, and obscurely moveable on the body of that organ. In the spaces which intervene between these encasements, the corpus spongiosum swells out during erection, which increases distortion, and gives a knobby appearance to the penis. The corpus spongiosum seems healthy from the bulb to the navicular fossæ, where it is decidedly atrophied, corded, and irregular, in consequence of a slight enlargement of the muciparous glands. The glans penis has a withered aspect.

This gentleman complains much of urinary irritation, being obliged to make water every second or third hour day and night. When the desire comes he must yield, and consequently he is compelled to pay great attention to his person to guard against offensive odour. He never discharges above two ounces of urine, and seldom empties the bladder, a point ascertained by instant catheterism in several instances. The stream is sometimes full but it is usually small, weak, scattered, and at the last it dribbles away slowly, being always delayed in the urethra, which hardly receives an instrument equal to its large diameter. About an inch in front of the bulb, it is necessary to use the slightest pressure, and at this part the catheter is strongly grasped when it is being removed. To the precise part various sensations are referred: sometimes an itchiness prevails, which requires a strong friction for its relief; sometimes there is a soreness for a few minute's duration, and again a pungent transitory pain shoots through it along the anterior part of the passage. Sexual desire languishes—erection is weak, but emission is well accomplished.

In an article by Pratisier (*Dictionnaire des Sciences Medicales*, t. 40), it is stated that he saw a patient in the Hôpital La Charité, in whom the urethra was embraced by a hard bony concretion, an inch in length, and about five or six lines in width. It impeded urination, and opposed the introduction of the catheter. M. Lamorissier is also said to have seen a similar case in private practice, and both cases are reported to have yielded to twenty days of mercurial frictions.

Under the head "*Des Tumeurs Dures Nœuds ou Ganglions des Corps Caverneux*," Boyer mentions this disease, which he affirms not to be uncommon in men of advanced years who have been greatly addicted to sexual indulgence, and that it frequently presents itself as a consequence of syphilis. He observes that the tumours are painless, except during erection, that on

those occasions the shape of the organ is altered, and seminal emissions accomplished with weak projectile powers.

The author remarks that he is not aware that the disease of the penis has been described, except in those cases to which he has now referred. The cases submitted to the reader occurred in persons of a decidedly gouty diathesis, and in whom neither syphilis nor gonorrhoea appear to exercise any predisponent influence. The structure involved appertains to that class of membranes in which gout so frequently lays its irremovable deposits; and these, under present considerations, appear to have a strong analogy to those which are found to affect the various tendons of the extreme members, their thecæ and aponeuroses.

It appears that there is a limit to these deposits in the genital organs, for in the cases related, after a certain amount had taken place, the disease made no advancement during the period they were subjected to examination and treatment.

The local distress disappears when the general derangement subsides. This cessation not unfrequently takes place by observance of a corrected regimen in those who will patiently observe it. The regulating influence of medicine is often most strikingly displayed in these cases, for symptoms rapidly yield to two or three days' discipline, with blue pill and James's powder at night, followed the following day by three moderate doses of rhubarb, magnesia, Brandish's solution in a weak infusion of cascarrilla, ginger, or orange rind, with a withdrawal of animal food, the use of the warm bath, and free but not fatiguing exercise.

The author's experience does not authorise him to recommend any particular plan of topical management. Successive blisters with continued discharge are troublesome and useless. Mercurial frictions, so much commended for their curative power, as above noticed, either simply or in combination with iodine, are equally unavailing.

The Extraction of Foreign Bodies from the External Auditory Passage.

By M. DIEFFENBACH.

This is often indispensable in the instance of children who have stuck peas, beads, berries, portions of chalk or stone in the ears. These are most readily scooped out with a curved director or a curette; if in the anterior part of the auditory tube, with forceps. In adults the meatus is sometimes blocked up with dead insects, plugs of cotton, and other things incrustated with cerumen, or with indurated cerumen itself. These, the cause of continued deafness for years, are best extracted with moderate-sized polypus forceps. It is advisable to drop in beforehand a little almond oil, and allow the patient to recline upon the opposite side of the head. Great caution is to be observed, so as not to injure the walls of the meatus, or the tympanum. Should violent bleeding supervene, and there be no likelihood of completing the operation at one sitting, cold, and afterwards warm, applications are to be resorted to, so as to favour suppuration. Subsequently, when the parts are relaxed,

the substance may be extracted. Fabricius Hildanus witnessed hemicrania, debility of the entire half of the body, obstinate cough, amenorrhoea, epilepsy, and wasting of the arm ensue from the circumstance of a bead having been forced into the ear. Restoration to health followed its abstraction. Sabatier saw typhus fever and death consequent upon the pressure of a pellet of paper in this situation. Power observed protracted salivation and atrophy result from a dossil of wool. I have noticed, after the removal of foreign bodies, long impacted in the ear, that the hearing became so acutely sensitive, as to require the ears to be stopped with cotton. Should a living insect create any distressing symptoms, it may be picked out by the aid of a tuft of cotton fastened to the end of a match; or killed with a drop of oil, and then readily extricated. Solution of acetate of lead, dilute cherry-laurel water, and a weak solution of corrosive sublimate have been used for the same purpose. Comperat destroyed an insect larva in the meatus auditorius by means of tincture of opium. Andry states that a round worm crept along the eustachian tube into the ear.

COX, DAVIES, AND SILK, v. THE MIDLAND RAILWAY COMPANY.

To the Editor of the Provincial Medical and Surgical Journal.

SIR,—As you have repeatedly animadverted upon the conduct of the Railway Company in this important case, I trust you will afford me the opportunity, through the medium of your columns, of bringing the case again before the public, as it has at last terminated in a manner which crowns the whole proceedings, by an execution being issued by the Company against the plaintiffs for their costs in this action; and by my having had an execution put into my house, and my goods and chattels virtually seized in payment of my share in such costs, amounting to £99. 14s., which I have actually paid, I think it only fair that both the medical profession, and the public, whom I consider vitally interested by the decision in this important case, should be made acquainted with their relative positions. As the decision in this case clearly shows that the Company are not bound to provide medical assistance to a passenger in case of accident upon their line, and that the servants of the Company have no authority to call in medical assistance, and should they so far outstep their authority as to call in medical assistance, that the Company are not bound to pay the doctor, and the only person the doctor has to look to for payment is the party injured, and in the event of their being too poor to pay, the only chance he has of being remunerated for his services is by the party injured bringing an action against the Company, and should they succeed in recovering compensation for the injury, still, it remains to the honor of the party injured whether they will pay the doctor, as it is now quite clear he has not any claim against the Company, I should like to know what medical man, under such circumstances, (unless he is fully assured of the respectability of the party

injured) will volunteer his services to take charge of a railway accident, and run the risk of having a very severe and dangerous case under his hands, for two or three months probably, at a distance of three or four miles from his residence. Since this case has been before the public, I have repeatedly asked several of the porters at the different stations, as likewise several of the guards belonging to the Midland Company, what they should do in case of accident. The answers I have invariably received has been that they did not know what to do; they should do nothing; leave the parties injured to their fate.

It appears to me a very hard case, that three humble individuals, suing a great and powerful Company, for what was fairly and justly due to them for services rendered to a poor unfortunate individual who had met with a most serious and dangerous accident upon their line of railway, and whose life must have fallen a sacrifice, but for the prompt and efficient medical assistance having been rendered to him, and which accident was clearly shown to have arisen from the carelessness of the Company's servants, should not only be deprived of what was justly due to them, but likewise called upon to pay the costs of the Company in defending this action; more especially when it is taken into account that this case ultimately terminated in favour of the Railway upon a point of law which I believe had never before been mooted, since the introduction of railways, viz., the non-liability or responsibility of Railway Companies for orders actually given by the servants of the Company.

I am, Sir,

Your obedient servant,

J. DAVIES, M.D.

Blythe Cottage, Coleshill, Warwickshire,
November, 1849.

P.S. For particulars see *Daily News*, January 18th, 1849; *The Times*, January 30th, 1849; *Aris's Birmingham Gazette*, February 5th, 1849; and *Aris's Birmingham Gazette*, March 19th, 1849.

The following letter has been addressed by W. Sands Cox, Esq., to the Editor of the *Birmingham Journal* :—

COX v. THE MIDLAND RAILWAY COMPANY.

To the Editor of the *Birmingham Journal*.

November 29, 1849.

Temple Row, Birmingham.

SIR,—It is not my intention to bandy contradictions with the mouth-piece of the Board of Directors of the Midland Railway Company. I cannot, however, allow the charge of misrepresentation brought against me in Mr. Bell's letter, published in your paper of Saturday last, to pass wholly unnoticed.

It is asserted that I have falsely stated the facts and merits of the case against the Company, and the terms of the arrangement by which the action brought against the Company by Higgins was compromised.

My answer to the first part of the accusation is, that I proved "the facts and merits" as stated by me to the satisfaction of a jury, by evidence which called forth from Mr. Justice Maule, who presided at the

trial, strong comments on the conduct of the Board of Directors in resisting my claim.

In answer to the latter part of the accusation I can only repeat, that the letters of the highly respectable gentleman who held Higgins's brief, which I referred to as my authority for the version I gave of the terms of the compromise, fully bear out my statement. These letters I have no doubt are still in the hands of Higgins's attorney, and may be seen by Mr. Bell on behalf of the Board of Directors, if my veracity be still questioned.

These letters have been published, and may be found in *Aris's Gazette* of Monday last, by any person who will take the trouble to ascertain whether I have misrepresented their contents. I refer the Board of Directors to the originals, because by them I am accused of misrepresentation.

With respect to the merit claimed by the Board for not defending to the utmost the action brought by Higgins, because he was a poor man, I beg to call attention to one fact, that the compromise was made in Court, *after Higgins had incurred every expense he could be put to*, in preparing briefs, retaining Counsel, and bringing his witnesses to the assize town.

Whether the Board was then influenced by compassion for the poor man, or by other motives, the public will judge for itself; their conduct would justify the inference that they were disappointed in their expectations that "the poor man" would be unable to find means to prosecute his claim.

With these remarks I wash my hands of the Board of Directors of the Midland Railway Company. I thought it right to hold their conduct up to public scorn, and with my best thanks to you for enabling me to arraign them before the only tribunal to which they are amenable,

I remain, Sir,

Your obedient servant,

WILLIAM SANDS COX.

The subjoined petition to Parliament has been prepared, and signed by more than 100 practitioners of Birmingham and the neighbourhood.

PETITION FROM THE MEDICAL PRACTITIONERS OF
BIRMINGHAM.

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament Assembled.

The humble Petition of the Physicians and Surgeons of the Borough of Birmingham and its district,
Sheweth,—

That your Petitioners have been informed and believe, that in the afternoon of the eighth of February, one thousand eight hundred and forty-seven, Joseph Higgins, of Coleshill, labourer, was run over by one of the Midland Railway Company's carriages, at the Whitacre Junction Station, distant about ten miles from Birmingham, through the negligence of the Company's servants, by which his legs were severely crushed; that, from the nature of the injuries, it was deemed necessary by Messrs. Davies, Bourne, and Barker, the surgeons in attendance, to hold a consultation on the case with some hospital surgeon.

That the attendance of Professor Sands Cox at mid-night was required.

That amputation above the knee was performed by Mr. Cox.

That the said Joseph Higgins recovered from the accident, and brought an action at law against the said Company for compensation; that the cause was entered for trial at Warwick, at the summer assizes for one thousand eight hundred and forty-seven, but the same was settled in Court without being tried, on the Company's council agreeing to pay the man one hundred and fifty pounds and his costs, and also to pay the medical and surgical charges.

That Professor Sands Cox charged the said Company twenty-one pounds, (for the amputation and attendance,) and three pounds three shillings each for two subsequent attendances; and in the spring of one thousand eight hundred and forty-eight, when a verdict was given for Mr. Cox for the whole amount of his bill, leave being given to move for a nonsuit, on the ground that the Company were not liable, inasmuch as being a corporation they could only be bound by compacts under seal.

That on the seventeenth day of January last, Mr. Baron Park gave judgment on the said action, and stated that her Majesty's Court of Exchequer were unanimously of opinion, "That no power to enter into any such contracts, as those on which that action was brought, was incidental to the employment of a guard or superintendent of a railway company, and that being so, the Company was not liable in that action, and that, therefore, the rule must be made absolute to enter a nonsuit."

That the result of this trial shews that surgeons and medical men, placed in a similar situation to Mr. Cox, are without the means of obtaining payment for their services, as your petitioners are advised, that no action can be maintained against the man Higgins, even had he been in a situation to pay.

Your petitioners, therefore, humbly pray, that your Honourable House will be pleased to make a law, whereby surgeons and medical men may have a legal right to recover against railway companies, a fair remuneration for their services, in cases of accidents on railroads; or, that your Honourable House will be pleased to make such other provision for your petitioners in the premises, as to your Honourable House shall seem meet.

ON THE REMOVAL OF SCIRRHUS OF THE MAMMA BY THE KNIFE.

To the Editor of the Provincial Medical and Surgical Journal.

SIR,—The questions put by your correspondent, Mr. Clement Hawkins, relative to operations for the removal of scirrhus of the female breast, are too pertinent and important to pass unnoticed, and I cannot permit myself to omit the opportunity of offering my quota towards their solution, which I shall do with all possible brevity.

1.—It can scarcely be doubted that a peculiar con-

dition of the system leads to the development of scirrhus in any particular organ, and that the seat of its development must depend on local causes of an accidental nature, not unfrequently a slight blow or other injury. Hence it is, perhaps, that an analogous local cause, the necessary accompaniment of a surgical operation, seldom, if ever, fails to give a powerful impulse to the constitutional tendency (scirrhus diathesis) to reproduce, with an accelerated progress, the diseased action.

2.—The premises adduced afford a decisive answer to the second question; and if I mistake not, the principle is becoming daily more and more exposed by experience, that the removal of a scirrhus female breast by the knife is *not advisable*, even when in an indolent state.

3.—When the operation has been performed under the most favourable auspices, supposing the disease to have been confirmed scirrhus, my experience and observation convince me that the result is very rarely, if ever, favourable; that in most cases the return of diseased action takes place before the entire closure of the wound, or within a very limited period afterwards, and that it goes on to a fatal termination with greatly accelerated speed, the life of the patient being curtailed, and the suffering greatly increased. The answer received by Mr. Hawkins from his medical friends is full of practical wisdom and truth,—“The less you interfere the better.”

Nevertheless, it is not to be inferred that art is altogether useless, either in the relief of suffering, or even in arresting the progress of disease. Both may be effected to some extent by careful attention to the general health, and by the employment of soothing applications to the seat of disease in its more advanced stages. When ulceration has taken place, dressings containing opium will often be found especially useful, and in all stages the greatest care should be taken to prevent pressure on the part from too close fitting of the dress.

The inexpediency of operating in cases of scirrhus mammae applies to all other cases of cancer with nearly equal force; and when the operator is induced by the early and complete cicatrization of the wound to believe that the cure of his patient is completed, he has very soon the mortification of finding a return of disease; and though some surgeons have courage and perseverance to perform repeated operations on the same patient, they cannot succeed in ousting the enemy from the citadel; the more frequent the attacks made with the knife the stronger he becomes, until his victory is complete, and the history of the patient is brought to a hasty close.

Female breasts have been removed by operation in a condition approaching to, but not quite arrived at, scirrhus, in which, perhaps, by anticipation, the cure has been effected. When carefully examined after excision, the gland is found firmer and more compact in its texture, but still not in a truly scirrhus state, though probably its normal organisation was in the transition stage. Many years ago I removed from the same patient, at an interval of a year or two, both breasts, which appeared to be in this semi-scirrhus condition. The recovery was complete, and she is

yet living, in the enjoyment of tolerable health, though not without an occasional alarm of threatened uterine disease. But I must not further encroach upon your pages.

I remain, Sir, your obedient servant,

T. M. GREENHOW.

Newcastle-upon-Tyne,

November 23, 1849.

ON THE EDITORIAL REMARKS ON THE FUNGOID THEORY OF CHOLERA.

To the Editors of the Provincial Medical and Surgical Journal.

GENTLEMEN,—As you have made the “Fungoid Theory of Cholera” the subject of notice in your editorial remarks, I think that, as a member of the Provincial Association and of the Bristol Microscopic Cholera Committee, I may reasonably expect the insertion of a few words, (although anonymously like your own,) upon the statements made in the articles alluded to.

It is quite true that you expressed your doubts as to the value of Messrs. Brittan and Swayne’s researches, and wrote at a time calculated to discourage their efforts, but in the next number of the *Journal* (when the whole discovery had been made public, and was exciting universal attention, and when it would not do to be behind hand,) our report appears at length, with some well-executed wood-cuts, made from Mr. Swayne’s etchings.*

The next event in this history was the publication of letters in the medical journals by Mr. Busk, and other London observers, and the Report of the Microscopical Committee of the College of Physicians, and then in the editorial article in your last number you state, that communications have been made which will call in question the validity of the facts published by the Bristol Committee. I need only say that such a statement proves (if anything were needed to prove it) the anomaly of having irresponsible editorial articles in a journal, the *property* of a particular class of men.

Your statements are absolutely incorrect when you say that “bodies identical in appearance were found in other secretions, and in other diseases; and when present in cholera stools were seen not to be so on their first dejection, but to become apparent only after the lapse of a few hours;”† and you are apparently not aware, that considerably before the appearance of your last number Mr. Busk had himself seen the absurdity of mistaking the peculiar cholera cells for blood discs, and had published a contradiction of his hasty conclusion.

With respect to that most feeble progeny of the Committee of the College of Physicians, to the surprise of everybody who has read it, the College has not been

ashamed to adopt it; but, as is well known, a body of men will do for others, what no responsible individual will do for himself. It proves that if any one in Bristol came to hasty conclusions,* they were still more precipitate, and that they were determined not to see what the more active provincials have seen, and that their object in writing the report was not to advance science, but to put down by authority the efforts of others.

In conclusion, I must be allowed to state that, as you confess you prejudged the question,† we think your prejudice should have been in our favour, and not against us, and that your adoption and support of the opinions of the London authorities instead of ours, was not what might have been expected from the *Provincial Medical and Surgical Journal*.

I remain, Gentlemen,

Your obedient servant,

A MEMBER OF THE PROVINCIAL ASSOCIATION,
AND OF THE BRISTOL MICROSCOPIC CHOLERA
COMMITTEE.

ON NEURALGIA FOLLOWING HERPES ZOSTER.

To the Editors of the Provincial Medical and Surgical Journal.

GENTLEMEN,—I have during the last four years met with several very obstinate cases of neuralgia accompanying the common form of herpes zoster, and continuing long after the eruption has run its course; the pain is always confined to one side of the body, following the course of those superficial branches of the spinal nerves which are distributed over the scapular region, under the axilla and breast. The severity of the pain has been greater in two aged women than in younger individuals, but in each of them the intensity of the suffering has been great, has appeared to defy all the remedies which I have tried, and has had its own course of about three months before it subsided materially. In one case, that of a woman aged 79 years, the patient died apparently worn out with pain.

The medicines given have been quinine, various preparations of iron, alteratives, purgatives, and arsenic. The external applications have consisted of laudanum, with soap and camphor liniment, veratria, morphia and aconitina separately, in the form of ointment. No marked benefit was derived from any of these means, and no palliative was to be depended on except a night-dose of *Liquor Opii Sedativus*.

On consulting an eminent physician in London, I found no encouragement from him to depend upon remedies, but his experience of these cases is the same as my own, viz., that the disease will have its own course, and only admits of palliation by opiates.

* I may mention that, after some discussion upon the subject, our report was sent to the *Provincial Journal* because the discovery was a provincial one, and we thought the *Journal* the natural channel for its publication, and that we considered it due to the *Journal* that it should first publish the report which was so anxiously expected.

† Mr. Brittan has seen them, (as repeatedly stated) in flakes removed from the mucous membrane of the intestine at a *post-mortem* examination of a cholera patient.

* Messrs. Brittan and Swayne’s microscopical examination of consecutive evacuations in so many cholera cases, with their careful reports of the appearances and results of the cases, scarcely deserves the term you apply to it—“hasty generalizations,” “brilliant flights of fancy”—so much as the meagre and negative investigations of the College of Physicians’ Sub-Committee, except that the term “brilliant” can nowhere be applied to the latter.

† *Vide* Editorial Articles in Nos. XXI. and XXIII.

If you think proper to insert this communication in the *Journal*, it may, perhaps, meet the eyes of some one who may have been more successful in the treatment of these cases than myself, and elicit observations through the same medium, which may prove the means of lessening human suffering.

I am, gentlemen,

Your obedient servant,

FREDERICK FRANCIS GIRAUD.

Faversham, Kent, November 21, 1849.

ON THE PROPRIETY OF PETITIONING FOR AN ALTERATION IN THE PRESENT SYSTEM OF MEDICAL RELIEF.

To the Editor of the Provincial Medical and Surgical Journal.

SIR,—As the beginning of the Parliamentary Session is near at hand, I would call the attention of the Poor-Law Medical Officers to the wish of the Convention, which has been already expressed, namely, that each medical officer to a district should obtain the signatures of the respectable inhabitants of his neighbourhood, to one or more petitions requesting certain alterations in the present system of medical relief. If each will exert himself to obtain these, and have them presented by the local members of Parliament, at the same time drawing the attention of the representatives to the proposed requests, I have no doubt but that these gentlemen would see the justice and the necessity of endeavouring to obtain them. I have now several petitions in the course of signature, and I have found no objection on the part of the public to sign them. If each would assist in the good work, there is little doubt but that our *status*, as well as our income, would be greatly improved.

I am, Sir,

Your obedient servant,

GEORGE FREDERIC WILLS.

Crewkerne, November 16, 1849.

ON THE PROPOSED NEW CHARTER OF THE COLLEGE OF SURGEONS.

To the Editor of the Provincial Medical and Surgical Journal.

SIR,—I have been an attentive reader of our *Journal* since its commencement; I have observed with pleasure the improvement which has year by year marked its onward course; I have gleaned many useful hints, and have obtained much information, from the lectures, the letters, and the critiques which its pages have contained. I must, however, *en passant*, take shame to myself that I have never contributed even a solitary case, but it is not too late to reform, and as I have now put pen to paper, the *cacoethes scribendi* may take hold of me, and I may, possibly, become a troublesome, if not an instructive contributor. I have not been able to resist the desire of expressing the very great pleasure I ex-

perienced on reading the brief announcement in your last number, that the Council of the College of Surgeons had decided, by a large majority, to take measures to repair the monstrous injustice which their Charter of 1843 had inflicted on the great body of its members. I have never ceased, in public and in private, to denounce that Act in the terms which it deserved. It can do no good to repeat the tale which your pages have so often told: it is, alas! but too familiar to every M.R.C.S. Let us, one and all, exult in the knowledge that justice is at length, (late though it be,) to be granted to us.

Proud shall I be, for one, to write Fellow to my name, when that honour is accorded to me as a right of membership of I care not how many years' standing. I cannot help expressing the opinion, that many of our esteemed members would have better consulted the dignity of the College, and have better maintained their own self-respect, if they had shown less eagerness to obtain the Fellowship through the portal of an examination, which could not be difficult, and which, in fact, every member had once submitted to, to place himself on a level, in point of standing, with the heads of the profession. There can be no doubt that this rushing up to the examination has been foremost amongst the means of perpetuating our degradation for six long years.

The Council of our Association must now be prompt and energetic in assisting, by all the means within their power, this remodelling of the Charter of the College of Surgeons of England.

I remain, Sir,

Your obedient servant,

THOS. FAWSITT.

Oldham, November 21, 1849.

Medical Intelligence.

DEATH FROM CHLOROFORM.

An inquest was held on Wednesday last, at the Crown Inn, Pride Hill, Shrewsbury, before G. Gordon, Esq., coroner, and a respectable jury, on the body of Mrs. Jones. The deceased was a patient of W. J. Clement, Esq., surgeon, of Shrewsbury.

Mr. Clement deposed that the deceased was a patient of his, and that she came to town on the Saturday previously, from the neighbourhood of the Craven Arms, to undergo the operation of the removal of the eye-ball, which was degenerated; he saw her on Tuesday, and Wednesday morning was fixed upon for the operation. About one o'clock on that day Mr. Clement commenced the operation. There were present Mr. Heathcote, surgeon, Mr. Clement's two pupils, and Miss Wilson, the landlady with whom the deceased lodged. He administered chloroform to the deceased, the operation being exceedingly painful; she was fully aware of the effect of chloroform. He gave her but a small dose to commence with, imbibed from a sponge, and then commenced the operation. Finding that did not make her insensible, about a drachm more was poured on the sponge, which she inhaled again for a few seconds. He then went on with the operation, and shortly afterwards

heard a peculiar sound, which he could not describe, and she died in a moment; all the attempts to rouse her proved ineffectual. She spoke in Welsh before she died, but so quickly that he did not know what she said; he had no doubt that she died from the effects of the chloroform, which produced apoplexy. He had given patients three times the quantity that was administered to the deceased.

Mr. J. N. Heathcote deposed that he was present on the death of the deceased, assisting in the operation, and that the evidence of Mr. Clement was correct; he added that he mentioned to the deceased that the chloroform would ease her from her pain, and she was quite willing to take it; he was holding her when she died; she died quite suddenly, and without a struggle—as quick as if killed by prussic acid.

The jury returned a verdict of “Died of apoplexy, caused by inhaling one drachm of chloroform.”—*Eddowes's Shrewsbury Journal*.

CHOLERA IN AMERICA.

The cholera has again made its appearance on the Mississippi river. Two steamers, both from New Orleans, had arrived at St. Louis with immigrants; on board one of these vessels there were thirty cases, seventeen of which proved fatal before arrival at that city.

HARVEIAN SOCIETY.

At the last meeting of the members of this Society, the following appointments were made for the ensuing year:—*Presidents*: Dr. Ridge, 37, Cavendish Square; George James Squibb, Esq., 6, Orchard Street, Portman Square.—*Treasurer*: Dr. Stroud, 20, Great Coram Street.—*Honorary Secretary*: Dr. Powell, 21, Edward Street, Portman Square.

CEREBRO-SPINAL MENINGITIS.

This disease, which has been reigning epidemically among the garrisons of some French towns, has made terrible havoc at Logrono and Ribafrecha, in Spain. In the latter place full one-tenth of a population of 300 souls were attacked, and twenty-two died. The natives call the affection *clavo* or *sarmiento*.

MUNIFICENT BEQUEST.

The late Mr. Lewis Morris Cuthbert, of Lyon Terrace, Maida Hill, has bequeathed £3,000 to the Hospital for Consumption at Brompton, £1,000 to the Royal Free Hospital, £500 to University College Hospital, and £100 to the Western General Dispensary.

APPOINTMENTS.

Dr. Corbett, Assistant-Surgeon to the *Centaur*, appointed to the *Snap Tender*; Mr. Walling, to be Assistant-Surgeon to the *Pluto*; Howard R. Banks, Esq., to be Surgeon to the *Terrible* steam frigate; Dr. Gibson, to be Surgeon-Superintendent of the *Neptune*, convict ship; Assistant-Surgeon King, to be Surgeon

to the *Euridice*, vice Gibson, appointed to the *Neptune*; Assistant-Surgeon Elliott to be Surgeon to the *Castor*, vice Dr. Munro, deceased.

We have much pleasure in stating that the Secretary of State has appointed Mr. R. L. Hooper, of London Road, Southwark, to be Surgeon to the Queen's Prison, vacant by the lamented death of Mr. Thomas Morton, notwithstanding the great interest made by numerous candidates of high professional reputation. This must be considered an act of justice rendered to a gentleman who has performed nearly all the medical duties of the prison for the last twenty years, and, at the same time, reflects much credit upon Sir George Grey for his impartiality and discrimination. The office of assistant-surgeon to the prison (held so long by Mr. Hooper) has been abolished.

UNIVERSITY OF LONDON.

M.B. SECOND EXAMINATION.—1849.

First Division.—Thomas Rhodes Armitage, King's College; William Ayre, London Hospital; Edward Enfield Barron, Guy's Hospital; Cornelius Black, Edinburgh School of Medicine; William Henry Colborne, University College; Joseph Drew, Royal Manchester School of Medicine; Samuel Weston Devenish, Guy's Hospital; James Morris, University College; Samuel James Augustus Salter, King's College; Sherard Freeman Statham, University College; Edmund Whitaker, University College.

Second Division.—Robert Trout Hawley Bartley, Bristol Medical School; Soorjocoomar G. Chuckerbutty, University College.

EXAMINATION FOR HONOURS.

Physiology and Comparative Anatomy.—Cornelius Black, (Scholarship and Gold Medal) Edinburgh School of Medicine; James Morris, (Gold Medal) University College. William Ayre, London Hospital, and William Henry Colborne, University College, equal.

Surgery.—Joseph Drew, (Gold Medal) Royal Manchester School of Medicine; James Morris, University College, equal. Cornelius Black, (Gold Medal) Edinburgh School of Medicine.

Medicine.—S. F. Statham, (Gold Medal) University College; Cornelius Black, (Gold Medal) Edinburgh School of Medicine; Thomas Rhodes Armitage, King's College; William Hare, London Hospital; Joseph Drew, Royal Manchester School of Medicine; James Morris, University College.

Midwifery.—Thos. Rhodes Armitage, King's College; Cornelius Black, Edinburgh School of Medicine.

M.D. EXAMINATION.—1849.

First Division.—Thomas Snow Beck, University College; Soorjocoomar G. Chuckerbutty, University College; John Owen Evans, University College; H. Fred. Augustus Goodridge, University College; Robert Dawson Harling, University College; Thos. Hawksley, King's College; Frederick John Hensley, King's College; Jabez Spence Ramskill, Guy's Hospital.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Members on Friday, November 23rd, 1849:—Franklin Geo. Evans, Cardiff, Glamorgan-shire; James Newham, Lynn Regis, Norfolk; Henry Parker, Sheffield; William Robert Stewart, Hackney; Henry Herve Woolhouse, Army; John Weekes, Tavistock, Devon; Samuel Whitlow, Lower Whitley, Cheshire.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Members on Thursday, November 22nd, 1849:—William Spence Brown, Strood, Kent; Fortescue John Morgan, Henley-on-Thames; James Rigby, Stockport, Cheshire; James Mozley Stark, Gainsborough; James William Henry Veitch, Portsmouth.

Gentlemen admitted Members on Thursday, Nov. 29th, 1849:—George Edwin Gains; Edward Humphrey Paget, Leicester; Samuel Reynolds, Debach.

OBITUARY.

November 22nd, at Sydenham, Kent, Wm. Roberts, Esq., Surgeon, late of the 1st Royals, aged 71.

November 25th, at Weymouth, Dr. Cardew, late Physician to the Bath General and United Hospitals, and of Laura Place in that city. Dr. Cardew was a member of the Provincial Medical and Surgical Association.

December 2nd, at No. 12, Grove, Hackney, Mr. Edmund Sheffield, Surgeon, aged 71.

December 3rd, at Burwood Place, Hyde Park, Louis Truefitt, Esq., Surgeon.

Lately, at Runcorn, Mr. Thomas Case, Surgeon.—At Blackburn, Mr. John Spencer Birch, Surgeon.—At the Cape, Dr. Deas, Surgeon-Superintendent of the *Neptune*, convict ship, and Dr. Munro, Surgeon of the *Castor*.—At Brompton Crescent, Thomas Gunning, Esq., Inspector-General Army Medical Department, aged 74.—At Longfleet, near Poole, Dorset, Robert Carruthers, M.D., Royal Navy.

BOOKS RECEIVED FOR REVIEW.

Medical Report of the Hospital for Consumption and Diseases of the Chest, presented to the Committee of Management, by the Physicians of the Institution. London: Churchill. 1849. pp. 42.

On Tic Doloroux and other Painful Affections of the Nerves, with Suggestions for their Treatment by the Aneuralgicon. By Toogood Downing, M.D., &c. Churchill. 1849. pp. 73.

The American Journal of Dental Science—April.

The Medical Examiner and Record of Medical Science—May, June, July, and August.

The New York Journal of Medicine—September.

Letters to the Lord Advocate of Scotland on Medical Reform. By James Syme, F.R.S.E. Edinburgh: Sutherland and Knox. London: J. Highley. Pamphlet. 1849.

The Account of a Remarkable and Highly Interesting Case of Uterine Hydatids. By J. G. Davey, M.D. Colombo. 1849. Pamphlet.

Monthly Journal and Retrospect of the Medical Sciences, December, 1849.

On Stricture of the Urethra and Fistula in Perineo. By James Syme, F.R.S.E. Edinburgh: Sutherland and Knox. London: S. Highley. 8vo, pp. 72. 1849.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

NOTICE TO MEMBERS.

The Secretary presents his compliments to those members of the Provincial Medical and Surgical Association whose Subscriptions remain in Arrear, and begs respectfully to call their attention to the following Law, which was passed unanimously at the Anniversary Meeting, held at Bath, in 1848:—

“If any Member's Subscription remain unpaid twelve months after it shall have become due, the *Medical Journal* and other publications of the Society shall be withheld from such Member till his arrears be paid.”

He earnestly entreats all those gentlemen whose subscriptions are now in arrear, that they will cause them to be paid, either to himself, or to the Treasurer, Dr. Hastings, without further delay.

JAMES P. SHEPPARD,
Secretary to the Association.

ERRATA.

At page 645, first column, for “invalidates the fact” read “invalidates that fact.”

At page 645, second column, for “Dean” read “Dease.”

At page 646, first column, insert “in” before Charter-house Square.

At page 646, for “being any possible form” read “being all possible forms.”

At page 646, second column, for “now more decarbonized” read “now once more decarbonized.”

At page 647, second column, for “such an irritating medicine” read “such unirritating medicines.”

At page 648, first column, for “which proves destruction” read “which proves destructive.”

At page 648, second column, for “sleep after the injury” read “sleep off the injury.”

At page 649, first column, for “reparation” read “separation.”

TO CORRESPONDENTS.

Communications have been received from Mr. Jennings, Dr. May, Mr. Dyer, Mr. Knowles, Mr. Ross, and Dr. Davis.

It is requested that all letters and communications be sent to J. H. Walsh, Esq., Foregate Street, Worcester. Parcels and books for review may be addressed to the care of Mr. Churchill, Princes Street, Soho.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

CLINICAL

LECTURE ON HERNIA,

WITH

PREFATORY OBSERVATIONS, ADDRESSED TO THE STUDENTS
OF QUEEN'S COLLEGE, BIRMINGHAM.

By G. B. KNOWLES, F.R.C.S., F.L.S., &c.,

PROFESSOR OF BOTANY AND MATERIA MEDICA IN QUEEN'S COLLEGE,
AND SURGEON TO QUEEN'S HOSPITAL.

GENTLEMEN,—A case of hernia having been admitted into the hospital a few days ago, I have thought it desirable to select *strangulated hernia* as the subject of the present lecture. I shall also offer to your notice the particulars of certain other cases of a similar nature, which have fallen under my care in Queen's Hospital, with such practical remarks upon them as each case may seem to suggest.

It is scarcely necessary to observe that cases of hernia require to be examined with the most careful and discriminating attention, in order that you may satisfy yourselves as to their precise nature and condition; for it should be known and recollected that *inguinal hernia* has been mistaken for an enlarged inguinal gland. An inguinal hernia may also be so small as scarcely to be observed; it may in fact be so minute as to escape detection during life. It is stated by Professor Fergusson that he has known two cases where all the symptoms of strangulated hernia were present, and that although the most careful examination was made by very competent surgeons, the protrusion was not detected until dissection after death. Fergusson also remarks that he has known a truss ordered by a practitioner of great eminence and great experience in children's complaints, in the case of a boy, about five years of age, where the testis was presenting at the lower opening of the inguinal canal, and where there was no apparent disposition to protrusion of the bowels; and he mentions a recent instance that has come under his notice, where the testis, in a somewhat similar case, had been completely wasted away by the continued pressure of a truss. Still, however, in a large majority of instances, the diagnosis of a hernia, in a state of strangulation, is not difficult, and I only allude to these unfortunate mistakes for the purpose of impressing upon your minds the necessity of examining, with all due care, every disease that may come under your notice, but more especially those cases which, from their outward appear-

ance, might admit of the possibility of doubt as to their real nature. Besides, you must be well aware, that as surgeons, such cases will occasionally fall under your care, and that your reputation will be enhanced in proportion to the tact, and judgment, and ability displayed by you in the management of them. Let me recommend you, therefore, as clinical students, to acquire habits of close and accurate observation.

To observe in a cursory, careless, and superficial manner, will neither be beneficial to your patients nor to yourselves. I am induced to make this remark from having witnessed, both in the metropolis and in the provinces—(as every one must who has been much accustomed to the wards of an hospital)—from having witnessed, I say, the inquiring look, the scrutinizing eye, and the careful touch with which some students have examined a patient, while from others the same case has received but a superficial examination,—a mere passing glance, as though the business of clinical observation were perfectly easy, and scarcely required a serious thought. But I feel assured that students of the latter description will not often be found within the walls of the Queen's Hospital. The students of that establishment will, I have no doubt, be fully aware of the duties—the responsible duties, they have undertaken, and the advantages to be derived from the regular and faithful discharge of those duties. The wards of the hospital offer the most ample opportunities for observation; and as you are, doubtless, anxious to become able and intelligent practitioners, and hope to arrive at distinction in the profession which you have chosen, recollect that your object can only be effected by the most diligent and devoted attention to your various studies, of which one of the most important, in a practical point of view, is clinical observation. I would exhort you, therefore, to omit no opportunity of accurately observing, carefully investigating, and systematically recording such cases of importance as may be presented to your notice. By adopting and carrying out such a plan, *as students*, you will lay the foundation for those habits of regular and systematic observation which, as practitioners in after life, you will find of infinite importance.

Your examinations should, in all cases, be made carefully and deliberately, and should not be discontinued till you have satisfied yourselves, as far as possible, of the nature, seat, and extent of the disease. Our information upon these points is obtained chiefly

through the medium of our senses of sight, hearing, and touch. The eye of the experienced physician enables him, in many instances, even at first sight, to judge, not only of the nature of the patient's disease, but of the probability of his recovery. The well-practised ear also becomes a valuable and indispensable auxiliary. The touch of the surgeon, by careful and continued practice, acquires that delicacy of perception in detecting and judging of disease, which has been very appropriately termed the *tactus eruditus*, an advantage of immense importance, but which can never be acquired by the thoughtless and superficial observer. Let it be your constant endeavour, therefore, to embrace every opportunity of improving these particular faculties, in order that you may possess them in that high degree of perfection which is so characteristic of the expert and well-educated practitioner. I would caution you, however, when making your examination, more especially in cases which admit of the possibility of doubt, not to depend exclusively upon any *one* of the senses, but to bring them all to your aid, and to employ all your powers of discrimination, with a view to arrive at just and accurate conclusions; at the same time I would warn you not to allow any feeling of vanity or self-sufficiency to have place in your mind, lest from any fancied superiority of discernment, you may be induced to form a hasty and perhaps an erroneous judgment; which judgment being acted upon may prove destructive not only to your patient, but to your own reputation. In reference to these remarks, I will take leave to draw your attention to a case which, some few years ago, fell under the care of a distinguished surgeon, the late Mr. Liston, at University College Hospital. It was a case of aneurism, which is stated to have been mistaken for an abscess, and unfortunately was opened with a bistoury. This case, as reported by Dr. Bucknill, in the *Provincial Medical and Surgical Journal*, of Nov. 5, 1842, appears to me to illustrate very forcibly a remark which I have already made upon the necessity of an accurate and searching examination in every case which may admit of the possibility of a doubt. Mr. Liston, on the contrary, would appear to have been satisfied with a very superficial examination; and being well aware of the fact that aneurism is rarely met with in children, (the patient was about twelve years of age,) he hastily and imprudently jumped to the conclusion that the tumour in question is an abscess. The result must have been exceedingly mortifying to that gentleman, and in fact I allude to it with great regret, for there is no doubt that if the examination had been made with the requisite degree of care and attention, Mr. Liston, with that experience and sagacity which he was well known to possess, would immediately have detected the nature of the case. But as we may often reap advantage from the errors of others, so the present case may afford us a most useful lesson; it shows us that after a long life of professional experience we have still much to learn, and consequently that we should not presume with too much confidence upon the extent of our acquirements; for be it remembered, gentlemen, that some of the wisest

and most accomplished members of our profession have not been ashamed to confess that, after all their experience, they still considered themselves clinical students.

But it is time to return from this digression to the more immediate object of this lecture.

CASE I.—James Roberts, aged 23, by trade a caster, was admitted into the hospital on Tuesday, November 6, about mid-day. He states that he was suddenly seized with pain in the bowels, particularly in the groin, on Saturday, November the 3rd, which was followed by nausea and vomiting. The bowels became constipated, and everything taken into the stomach was immediately rejected. He had not applied for any medical advice from the Saturday (when he was first taken ill) till the Tuesday morning, when he was seen by a medical man, who advised his immediate removal to the hospital. His countenance was anxious and expressive of great distress, and his pulse was quick and very feeble. He was placed without delay in a hot-bath, and attempts were made to reduce the hernia (which was scrotal) by the taxis, but without effect. The vomiting, moreover, was decidedly stercoraceous. The operation was accordingly performed about six o'clock in the evening. Those gentlemen who were present upon that occasion will recollect that the first part of the operation was expedited by taking between the thumb and finger a fold of integument, and transfixing the same, immediately over the tumour,—a plan upon which I shall have to make a few observations, when relating some other cases. Being assured by the patient that he had never been afflicted with hernia before, and consequently, not expecting to meet with adhesions, it was my intention to have returned the tumour without opening the sac; owing to adhesions, however, it was found impossible to reach the stricture; the sac was accordingly opened, the stricture divided, and a small knuckle of intestine returned. The intestine was not seen, as it lay beneath a portion of omentum, which was extensively adherent to the parietes of the sac, and which, by its thickness and general appearance, proved the hernia to have been of long standing. The patient was immediately relieved; the bowels acted without medicine; the pulse improved; and the case went on satisfactorily.

CASE II.—Maria Steer, aged 54. Has had femoral hernia on the right side for 10 years. Has worn a truss which has not fitted well, and which has consequently been useless. The hernia has been returned with some difficulty on several occasions. It came down lower than usual on Thursday morning, February the 16th, the bowels being confined at the time. She was seen in the evening of that day by a medical man, who thought he had returned the contents of the sac, (as he had done on former occasions) and ordered her some opening medicine. On Friday, the 17th, she had intense pain, of a dragging character, with frequent vomiting, and the bowels had not acted. She omitted to send to her surgeon again, and consequently, nothing more was done until Saturday, the 18th, when, about 6, P.M., she was seen by another medical man, who also had recourse to the taxis, but without success. After persevering for some time, the patient became

easier rather suddenly, and the pain very soon entirely ceased, although the hernia was still unreduced. She was brought into the hospital about half-past nine the same evening. The taxis was applied for a *short time*, but in vain. She was placed in a warm-bath for nearly half an hour, during which time the temperature was raised to 110° Fahrenheit, and another attempt was made *in the bath* to reduce the tumour, but without effect. Pulse moderately firm and regular; symptoms by no means urgent. The operation was performed at one o'clock, A.M., on Sunday, February the 19th. On opening the sac, a portion of omentum presented anteriorly, beneath which was a fold of small intestine. When the stricture was divided, and the omentum returned, it was discovered that there was a perforation in the intestine, about large enough to admit the little finger, and through which faecal matter in a fluid state escaped freely, and in considerable quantity.

The opening in the intestine was closed by three stitches, and carefully returned within the abdomen. The gut presented a dark livid appearance. The external opening was closed by sutures and adhesive plaster, the ligatures hanging from the lower part of the wound.

Sunday, 9 A.M.—Patient on the whole comfortable; pulse firm and regular; tongue clean; bowels freely moved by an enema; has been slightly sick during the night; and there is considerable thirst. *Vespere*: Pulse good but rather quicker; thirst increased.

Monday 20th.—Pulse quick and small; thirst incessant; frequent nausea; and there is great pain, tenderness, and tension of the abdomen. Leeches, fomentations, and enemas, afforded no relief. *Vespere*: Is becoming rapidly worse, and evidently sinking. She died early on Tuesday morning.

An examination *post-mortem* showed extensive inflammation of the intestines, great discolouration, and slight adhesions between the convolutions. The ruptured portion of intestine, the edges of which had been brought together by stitches, was united; and there had been no escape of faecal matter.

In this case I wish more particularly to direct your attention to the rupture of the bowel, which it appears to me must have been produced by the attempt to return the hernia before she was brought to the hospital, for it will be recollected that during the attempt the pain ceased rather suddenly. That no violence should be used in the employment of the taxis, is so generally admitted, as scarcely to require a remark; for, as Sir Astley Cooper observes, it *has been* known to burst the intestine. Whether any degree of violence was used in this case at the time the pain so suddenly ceased, I had no means of knowing. When we take into consideration, however, that the hernia had been down *three days*, and that the patient had been in intense pain during the whole of that time, it is reasonable to suppose that the intestine was not in a condition to admit of much pressure without sustaining some degree of injury. It is of importance, therefore, to consider what may be the effect of a long and imprudent perseverance with the taxis. Sir Astley Cooper recommends it to be continued from a quarter to half an hour. Much, however, must be left to the discretion of the practitioner on this point. It is of still more importance to consider well the circumstances under

which it may be prudent or otherwise to attempt the reduction of the tumour by the hand.

It has been well observed by Scarpa, that strangulated hernia very frequently mortify from the negligence of the patients, and their unwillingness to submit to an operation, and perhaps still more frequently from the effect of the taxis unskilfully exercised by uninformed surgeons, who are determined, at any price whatsoever, to accomplish the speedy reduction of the protruded viscera. The majority of them, he remarks, make no distinction between the *acute* and the *chronic* strangulation. In both cases, no sooner are the symptoms of strangulation evinced, than they begin to handle the swelling roughly, and to push the viscera with all their might, in order to make them return into the abdomen; whereas, when the strangulation is *acute*, and the patient young and strong, the taxis ought never to be practised before all the means calculated to diminish the strength, calm spasm, and relax the parts which are to be reduced, have been employed for a certain time. At this School of Surgery, continues the same author, I have frequently had opportunities of observing the salutary effect of this treatment. My pupils have more than once seen hernia which had been painfully handled without any good, reduced, as it were, spontaneously, after a bleeding, or whilst the patient was in the bath.

If what I have said upon the subject of the acute strangulation, and the treatment it requires, were generally known by surgeons, I think that operations for strangulated hernia would be less frequent. Such is the opinion of the experienced Scarpa.* These remarks on the use and abuse of the taxis appear to me so important, that I could not refrain from offering them to your notice upon this occasion.

I would here offer a few remarks upon one particular point in the treatment which was adopted in this case—I mean the closure of the ruptured portion of bowel by stitches. I am fully aware that in cases where the intestine is in a state of gangrene, it is useless,—nay absurd, to attempt to repair the mischief by stitches. All that it is necessary to do, and, in fact, all that can with propriety be done in such a case, is to return the intestine within the abdomen, taking care to secure the mortified portion as near as possible to the wound. Such cases we know, for the most part, soon terminate fatally. Occasionally, however, they take a more favourable course; the intestine becomes adherent to the wound, and the result is an artificial anus. In a few still more fortunate instances the wound has gradually closed, and the faeces have resumed their natural course.

Now, the idea of having for life an artificial anus, is so horrid and disgusting, that I was induced, by way of experiment, to close the ruptured opening in the way already mentioned. Moreover, the intestine was by no means in a state of gangrene: it was much discoloured, but not more so than I have seen it in many cases which have eventually done well. It appeared also,

* Mr. Lawrence is of opinion that "when the rupture becomes painful, we are no longer justified in persevering in attempts at reduction by the hand. A sufficient pressure cannot now be endured, and the force which is employed only tends to increase the inflammation, and accelerate the approach of gangrene."

upon dissection, that lymph had been thrown out from the lips of the ruptured opening, and that union had taken place. That the cause of death was inflammation of the bowels, is very certain, as proved by the dissection; but it did not appear to me that the mischief had been increased by closing the ruptured bowel with stitches. Still, however, it is questionable, whether such practice should be adopted under any circumstances.

In reference to the subject of the taxis, I would beg leave to draw your attention to the opinion of Lisfranc upon this point, as stated in his "*Clinique Chirurgicale de l'Hôpital de la Pitié*." It is generally recommended, during the employment of the taxis, to place the patient in such a position as may most effectually relax the walls of the abdomen. This plan is objected to by M. Lisfranc, for the following reasons:—

1st. "When the parietes of the abdomen are relaxed, they are applied upon the viscera contained in its cavity. The capacity of the latter is diminished, and the displaced parts are returned with less ease. 2nd. The relaxed walls of the abdomen will yield to the fingers during the attempt at reduction. 3rd. The relaxation of the walls of the abdomen prevents the formation of a hernia, while a tense condition tends to produce it."

"I place the parietes," says the distinguished surgeon, "in a state of moderate tension, which facilitates the reduction. A comparison may illustrate what I mean. Endeavour to pass the clenched hand through an opening in a piece of cloth which is not kept on the stretch. It yields before you, and you effect your object with difficulty. If, however, it be stretched in the slightest possible degree, the opening will be passed with the greatest ease. But it will be objected to me, that this tension will narrow the abdominal rings. I reply—1st. That it is only a moderate degree of it that I recommend. 2nd. That the objection does not apply to the crural canal. 3rd. That the muscular fibres around the inguinal canal are not placed so advantageously for the production of this constriction as may be supposed. 4th. If in a thin subject, after the inguinal hernia is reduced, and the canal is spacious, the tissues covering its orifice are pushed through it by the finger, it will be found that the finger is not more compressed during tension than during relaxation of the abdominal parietes."

The reasoning of M. Lisfranc on this point of practice is, to my mind, not very convincing, and I only now direct your attention to it as a mode of procedure recommended by a very high authority. It may be well to add, that M. Lisfranc, in employing the taxis, places himself behind, instead of in front, or on the side of the tumour, drawing as it were the hernia towards him, and having, as he considers, in this position greater facility in directing it along the axis of the canal. He has frequently persevered in applying the taxis *for an hour*, and has never seen ill-consequences result from so doing.

If, however, we refer to the statistics of the mortality from hernia, as furnished by M. Malgaigne, it appears that out of 183 operations performed in the Parisian hospitals, between the years 1836 and 1841, 114 proved fatal, or nearly two-thirds. One cannot help suspecting, therefore, that too much dependence was placed upon the taxis, or that a majority of the patients were

not seen by their surgeons till inflammation, or possibly gangrene, had commenced; for it was the opinion of Mr. Pott, that the operation when performed in a proper manner, and in due time, does not prove the cause of death oftener than perhaps once in fifty times.

It is stated by Mr. Hey, that he had twice seen the disease prove fatal in about twenty-four hours—a convincing proof that some cases do not admit of much delay. That too much time is often lost by vain attempts at reduction, is beyond a doubt. By the delay of even a few hours the life of the patient may be placed in jeopardy, or may actually be lost. Mr. Hey has further remarked, that he had often had occasion to lament that he had operated too late, but never that he had operated too soon.

CASE III.—Samuel Rose, aged 55, labourer, was ruptured on the right side about seven years ago, while lifting a large piece of coal. Has worn a truss almost constantly, by which the hernia was generally prevented from descending; and when occasionally it came down he was always able to put it back himself.

April 27th.—Got up in the morning, and went to work as usual. Bowels had been constive for some days, and he had taken a small dose of jalap to relieve them. When at work he over exerted himself, and the hernia suddenly came down with great violence, accompanied by very severe pain. The tumour was harder and larger than it had ever been before. Being unable to work, he went into a barn, where he lay down and remained without any assistance for two hours, when a medical man saw him, tried to reduce the tumour, but finding it impossible, sent him to the Queen's Hospital.

The hernia came down at 8½ A.M., and he was admitted into the hospital about 2 P.M. The tumour was large, hard, and painful, occupying the right inguinal canal, and extending to the scrotum. He complained of pain of a dragging kind in the bowels, which were not open. The taxis was employed, but as it produced great pain it was abandoned. He vomited a little; pulse hard and 90.

5 P.M.—Was placed in a bath at 100°, when the taxis was again employed without effect. While in the bath he was bled to twenty-seven ounces; but though he became faint the tumour could not be reduced.

The operation was performed at 9 P.M. The sac was thin, and contained about eight inches of intestine. It was confined very firmly by the conjoined tendons of the internal oblique and transversalis muscles. After the operation, it was suggested that he should have a full dose of opium; and accordingly he had a draught, containing Tinct. Opii, dr. iss.

28th.—Has dozed much during the night, but has not slept soundly. There is slight soreness of the wound, but no pain in the bowels. Respiration 26, free; pulse 100, full and soft; skin moist; tongue brown and dry; great thirst; bowels not open. To have an injection containing two ounces of castor oil.

Noon.—Complains of pricking pains of the bowels. Injection has not operated.

2 P.M.—Bowels not opened; pulse 110. To take immediately one ounce of castor oil.

5 P.M.—Bowels not moved; pulse 120; tongue dry

pain in situation of the wound, but no general tenderness of abdomen. Respiration chiefly thoracic. The enema and the castor oil to be repeated. He was also ordered to take two grains of calomel every two hours.

7 P.M.—Pulse rapid and weaker; countenance anxious; bowels not moved; great pain in the neighbourhood of the wound after the enema. Ordered fomentations to the abdomen; and the calomel to be continued, with alternate doses of a purging mixture.

29th. Bowels not opened; pain abated; and he says he is better. The countenance, however, is very anxious; he has had no sleep; the pulse is 130, and very feeble; and he is evidently sinking. Died about 8 A.M.

Section Cadaveris.—There was little or no effusion into the peritoneal cavity; and the peritoneum nowhere presented any traces of inflammation. That portion of the omentum which had been strangulated with the intestine, had nearly recovered its natural colour. The intestine itself, as far as it had been strangulated, presented a dark appearance; its coats were soft and thickened; and blood was effused between its coats, at different points, in considerable quantity. On the internal surface was found much fibrinous matter mixed with coagulable lymph, and adhering so strongly to both sides of the bowel as to obstruct it and render it completely impervious. With the exception of the strangulated portion, every part of the intestines appeared perfectly healthy. In this case the immediate cause of death appears to have been effusion of blood within the injured portion of the intestine. This blood had become partially organized; which process had doubtless been promoted by the obstinate constipation which took place; and which unfortunately resisted all the means adopted for its removal.

In reflecting upon the treatment of this case, I cannot avoid attributing the fatal result, partly, (though not perhaps entirely) to the dose of opium.

The practice of giving an opiate after a formidable operation is by no means unusual, and, as a general rule, is, no doubt, very judicious. It diminishes the sensibility of the nervous system, and thereby allays pain and promotes sleep. But after the operation for hernia, it is of more importance to procure evacuations from the bowels, than to tranquillize the patient by an opiate. I am of opinion, therefore, that although the exhibition of an opiate might be strongly indicated by some peculiar condition of the patient, it should certainly be delayed till a free and satisfactory passage through the bowels has been obtained by appropriate laxatives.

CASE IV.—Richard Millward, aged 70, brass-founder, was admitted June the 5th. I first saw the patient at his own house in Tower Street, where I endeavoured for about twenty minutes to reduce the hernia, but not succeeding, I recommended his immediate removal to the Queen's Hospital. The tumour was not large, but very tense and unyielding.

It is observed by Fergusson, in his "System of Practical Surgery," that in many instances the surgeon can form a tolerably accurate idea, from previous expe-

rience, as to the likelihood of his efforts being successful or otherwise, as soon as he places his fingers upon the protrusion; and I believe there is some truth in the remark. It is never well, however, to jump to conclusions too hastily, for after a careful examination of the present case, I must confess I had very little hope of success without the operation. The result, however, proved that I was mistaken. While the warm bath was preparing, I again attempted to reduce the tumour, but in vain. It then occurred to me, that before having recourse to the ordinary methods of treatment, it might be well to try the plan recommended by Dr. O'Beirne, viz., the introduction of a gum-elastic tube, with a hole in the end of it, and the passing up of stimulating injections, or large portions of warm water. This author uses a tube not less than ten inches long, and introduces it as far as the sigmoid flexure of the colon. The tube employed in the present case was thirty inches long, and it was gradually and carefully passed till the whole of it was introduced with the exception of about six inches, so that it must have passed as far as the transverse arch of the colon. As it caused little or no pain or inconvenience, it was allowed to remain from twenty minutes to half an hour, when a large escape of flatus took place, and immediately afterwards the hernia receded. No injection was used, as I was anxious to see whether an escape of flatus would occur without the injection of fluids. I expected that such would be the case, and I was not disappointed.

The rationale of this plan is thus explained by O'Beirne:—"It draws off the flatus as well as the watery contents of the bowels, whilst the cold acting on the tumour condenses the air in the incarcerated intestine, and tends to cause it to pass more readily into the abdomen."

This practice is said to have been very successful in Ireland, but I am not aware of its having been frequently adopted in this country. I find, however, a case recorded by a Mr. Collambell, of Lambeth, in which the same mode of practice was attended with a fortunate result. *Vide Med. Gaz.*, 1842-3, fol. 318. I have since employed the same means in two or three cases without success.

CASE V.—In the summer of last year I was sent for to Sutton to see an old lady, a patient of Mr. Shaw, who was desirous of having a second opinion. It was a case of femoral hernia; it was small, very tense, and had been down the greater part of two days.

After dividing the stricture I returned the protruded part without opening the sac, a plan originally adopted by Petit; and recommended by Mr. Aston Key. The case was perfectly successful; the patient, who was upwards of 70 years of age, and who was very carefully attended by Mr. Shaw, not having a had single unpleasant symptom.

I was induced to employ this mode of operation from its being a recent hernia, and consequently free from adhesions; for it should be observed, that it is not to be recommended in all cases. In an old hernia, where adhesions, more or less extensive, are likely to exist, it would be scarcely prudent to omit the opening of the sac—a fact admitted by Mr. Key himself. He is of opinion, however, that the operation in question

has decided advantages,—that the inflamed intestine is not exposed nor roughly handled, the peritoneum is not wounded, and consequently, that inflammation is less likely to be induced, and the patient has altogether a better chance of recovery.

CASE VI.—Elizabeth Ballinger, aged 40, was admitted into Queen's Hospital in the evening of May the 17th, 1849, with femoral hernia. Her pulse was 100, very feeble; and her countenance was exceedingly anxious. Was first ruptured about eight years ago. Left off her truss about eighteen months ago after a severe illness. She had been accustomed to return the tumour herself; but on Tuesday the 15th, it came down and was found to be irreducible.

The usual means having been employed in vain to reduce the tumour, (which was large and rather firm,) she was operated upon the same evening. In making the first incision, I adopted a plan which I had successfully employed, I believe, upon two former occasions. This plan consists in raising with the thumb and finger, a fold of the integuments which cover the tumour, transfixing them with the bistoury, and then cutting them through, by which means an incision is obtained at once, from half an inch to two inches or more in length, and a great deal of tedious dissection is avoided. The sac, in fact, is immediately exposed, and the operation greatly facilitated. Upon opening the sac, a considerable portion of the omentum presented itself, beneath which was a small portion of intestine. Owing to the prominence of the protruded parts and the extensive adhesions, there was considerable difficulty in finding the stricture. After the division of the stricture the bowel was readily returned, together with the omentum as far as the adhesions would admit; but the attachments were so firm that I did not think it prudent to interfere with them. The bowels acted soon after she was removed to her bed, and again in the night.

Next morning the skin was hot, and there was considerable pain and tenderness of the abdomen. Pulse 120. Being apprehensive that peritonitis was about to come on, twelve leeches were applied, and she took two grains of calomel and half a grain of opium every two hours, which was continued till the gums were affected. The case did perfectly well.

CASE VII.—Elizabeth Grange, aged 50, was admitted into Queen's Hospital in the afternoon of May the 29th, 1849, with a large femoral hernia. She had been operated upon by Mr. Sands Cox in Queen's Hospital exactly three years before, viz., on the 29th of May, 1846. She has worn a truss since that time, but she states that it has not effectually answered the purpose. Upon the hernia coming down last night, she was unable to return it. The tumour is somewhat flaccid, and appears to consist chiefly of omentum. She had been vomiting during the whole of last night; and since she came into the hospital the vomiting has been decidedly stercoraceous. She was placed in a warm bath, at 110° Fahrenheit, and reduction attempted, but without success. The operation was performed about 5 P.M.

I would here wish to draw your attention to the mode of making the first incision, which was effected in

the same way as in the last case, viz., by raising up the integuments, and transfixing them. I had some hesitation in having recourse to this plan in the present case, from the flaccid state of the tumour. However, having repeatedly and carefully examined the parts, and satisfied myself, as I believed, that I held between my thumb and finger nothing but the superjacent integuments, I at once transfixed them, and to my great surprise laid bare a mass of omentum, in fact I had transfixed not only the integuments but the sac also. It becomes a question, therefore, whether this mode of operating is to be recommended in all cases; and I would suggest that this question be always very carefully considered before the plan be adopted. Covered by omentum was a small knuckle of intestine, which after the division of the stricture was readily returned.

The termination of this case was highly favourable. The bowels acted soon after the operation, and again in the course of the night. On the third day, the bowels not having been moved for several hours, she was ordered an enema, with castor oil. She had no unpleasant symptom after the operation; she took no medicine, and was discharged cured on the sixteenth day, having remained in the house some days, in order that she might be provided with a truss.

ON THE TREATMENT OF CHOLERA.

By C. W. BELL, M.D., MANCHESTER.

To William Strange, M.D., Bridgenorth.

SIR,—The letter which you have done me the honor to address to me in the *Provincial Medical and Surgical Journal*, has afforded me the highest gratification, because it bids me hope that others also may have arrived at the same conclusion, that the essential characteristic of cholera, whatever form it may assume, is a peculiar (paralytic) condition of the capillary vessels.

On most subjects in practical medicine theory may, ostensibly at least, be dispensed with, when the means of cure have been fully established by experience, but not in cholera, for in it the empirical method has led to no definite conclusions. At the end of more than a year's general experience, it is not too much to say that cholera remains, to the majority of the medical profession, as great an enigma as ever. But presuming experience to be equal, the question naturally arises how it happens that opinions can so much differ. In my own case, all that I have seen of the present epidemic only confirms my previous convictions, but my professional brethren in Manchester have arrived at a diametrically opposite conclusion from the same evidence. You and I, Sir, hold cholera to be a non-communicable disease, the effects of epidemic influence; they (in general) consider it a contagious malady. We look on purging as a contingent consequence, they as an essential primary symptom. We regard it as a disease of which the cessation of action in the capillary circulation is the point requiring most consideration; they are assured that the whole essence of the treat-

ment consists in the means of subduing excessive action in the intestinal capillaries. With them collapse, or coldness of the extremities, and cessation of the pulse, are effects, in all cases, of the purging. In our opinion the cold skin and tongue invariably precede the purging in simple cholera. It is impossible to imagine differences more irreconcilable than these, yet they are not merely theoretical, but the result of large experience and anxious observation on both sides; nevertheless each is speaking of a disease which the other would not hesitate to pronounce cholera, if asked its nature just previous to death. But the question is, would these opponents equally coincide in opinion in the commencement of the attack? Certainly not. Yet the end is the same. What then is the difference? Is it essential, or only in degree? In the answer to this question I conceive lies the solution of all the discrepancy of opinion evinced in the opinions of the thousand-and-one authors on cholera.

All I believe are agreed in considering the condition commonly called collapse, characterised by blue, mottled, and cold skin and tongue, &c., which unmistakeably indicates cholera, to be something peculiar to that disease which does not belong to syncope, whether produced by bleeding, purging, or otherwise; therefore, whether it is regarded as a species of syncope or not, it must be acknowledged to be a result of an unusual or epidemic cause, for otherwise death from hypercatharsis, however produced, would be impossible without the occurrence of this condition, which it is unnecessary to argue that it is not. If this be admitted, the question becomes so far limited, that it must be discussed whether this condition, produced by epidemic influence, be a cause or a consequence of the purging. Here the two parties are at decided issue, and it remains to be proved on the one hand that purging invariably precedes collapse, on the other that collapse may occur without any purging, and that where purging precedes algid symptoms in point of time, the connection between them is not necessary. Here, then, is a question of mere evidence, upon which the whole essential nature of the disease will hang; and if it can be determined, beyond a doubt, that the condition above described, called collapse, has occurred even in one single instance, unpreceded by purging, to a satisfactory amount, (voided, or not voided,) it will be proved incontestably, that premonitory diarrhoea is no essential part of cholera. Now, for my own part, I can positively assert, that many of the worst cases of collapse I have witnessed were not only unpreceded by diarrhoea, but attended with excessive constipation, and the bowels were undistended with fluid after death.

This is a question that I am far from attempting to settle on my own evidence, the same thing has been witnessed by many; and if this be the case, it is evident that some other cause for collapse must be sought for besides purging, and that until the idea—that diarrhoea is an essential symptom of cholera—be abandoned, it is vain to hope for progress in our knowledge of the disease. I hold that the profession can never agree on the subject, until it be considered

generally that purging as a *consequence* of choleraic congestion, is wholly distinct from cholera as a consequence of purging produced by other causes; and I esteem it, in the present unsettled state of medical opinion, a positive duty incumbent upon all who have perceived this essential difference, to follow your example in affording the necessary evidence to their brethren of the profession, to enable them to appreciate the distinction. The result of careful examination of this question I cannot doubt will be the division of cases of cholera into primary and secondary, palpably and obviously differing in their commencement, but distinguished with difficulty in the later stages.

The profession lies under the opprobrium in all countries, of being as ignorant of the true nature of cholera after it has twice in our own time visited almost every civilized land, as it was when the disease was only known to us by name and as something scarcely credible, and it is full time that we should emancipate ourselves from this disgrace. Scarce a week passes that the London medical journals do not prove by papers and the reports of Societies' transactions, these different diseases to be confounded under the same name; and even the queries propounded by the Royal College of Physicians, and by our own Association, show a manifest leaning to the opinion that diarrhoea and cholera are identical. You, Sir, have shown that cholera may display itself in other forms besides diarrhoea, and every one whose recollection carries him back beyond a year, can testify that fatal diarrhoea may exist epidemically without cholera. In the hope that it may illustrate these two points I shall now offer a short history of cholera, as it has lately appeared in Manchester, for it is only by reiterating evidence to that effect, that those who have not made similar observations for themselves, can now be induced to regard it as possible that the disease with which they have become familiarised under that name is compound, and requires analysis, in order to distinguish between the various causes which have combined in its production. But before I proceed to narrative, permit me to refer to one or two points in the history of disease, to which I endeavoured to draw attention in my address at the last Annual Meeting of the Provincial Association. First, with regard to putrid exhalation as a cause of disease, it was argued that active putrefactive particles being capable by application of communicating their own condition to organic substances of similar chemical composition, their contact would necessarily reduce our bodies to a mass of putridity but for the influence of life. That organic substances being products of vital chemistry, all tend when life is withdrawn, to dissolve themselves into inorganic chemical compounds, under the influence of the ordinary chemical laws by the process of eremacausis or putrefaction. That, therefore, the power by which bodies in a state of active decomposition, induce their own condition on other like substances, is the power most diametrically opposed to vitality. When, therefore, a man is so situated as hourly to bring into contact with his blood minute particles of matter in this active condition, the vital powers being occupied in resisting this

influence, are rendered less competent to oppose any other cause of disease that may be applied, such as contagion or epidemic influence.

With regard to epidemic diseases, (in the strict sense of the word) they were regarded as the effect of unknown causes operating on the system like known therapeutical agents, and producing disturbance of *function* in some organ or class of organs, (any structural derangement that followed, being held to be the effect of vital resistance to functional disorder.)

If, then, a tendency to putrid fever previously exist from the influence of the first mentioned cause, and an epidemic cause then disturb the functions of any important class of organs, the derangement of health thus induced will weaken resistance to putrefaction, the operation of which had weakened resistance to the epidemic cause, and fever of a putrid character will arise, characterised by special derangement of those organs which the epidemic cause has the power to disturb. This disease will, therefore, alike differ from simple typhoid fever, and from the epidemic disease where no putrefactive causes exist. It will be in the purlieus of towns, ill-drained and ill-ventilated places, typhoid fever with pneumonia, bronchitis, ulceration of the bowels, &c., whereas, in a purer atmosphere, the epidemic only appears as influenza or autumnal diarrhoea, or whatever it may chance to be; in the latter cases the disease is incommunicable, but not (apparently) so in unhealthy places, for putrid fever is highly contagious, and its contagion, by removing resistance to epidemic influence, induced the superior position of the symptoms that belong to that pervading cause in the second case, as in the first.

Now, epidemic dysentery is the result of such influence in warmer climates, and not contagious; so also, is its analogue in our own country—English cholera and autumnal diarrhoea. But few who have had much to do with dispensary practice can have failed to perceive that our autumnal diarrhoea, when aided by putrid exhalations from cess-pools, over crowding, &c., occasionally becomes an intensely contagious dysentery among our poorer population. But the history of the Pentonville Penitentiary, slave ships, &c., proves to us that a local epidemic atmosphere capable of producing dysentery, may be engendered by filth independently of the functional derangement, which we have attributed to more widely-spread epidemic causes, and the disease so induced is always contagious.

The explanation of this appears to be, that the putrefaction of intestinal mucus in cess-pools and drains, loads the air with its active particles, which, when absorbed, or as Dr. Snow supposes, taken into the alimentary canal along with food or water, act upon that substance in the body, which is identical with their origin, and convert the mucus in the intestines to the condition of a putrid irritant, producing effects, similar to those of ophthalmic or gonorrhoeal matter applied to the conjunctiva.

Now, it appears to me, that the fatal disease which in the Registrar-General's tables is called diarrhoea, is partly pure epidemic and non-contagious dysentery, but

chiefly of the above character, where epidemic influence has combined with putrefactive causes to produce a more virulent malady; and that in London almost all the cases registered as cholera have so commenced; and that where, in addition to these causes, a feeble tendency to cholera prevailed, it was enabled to produce its peculiar effects on the system only after all vital resistance to it had been withdrawn by the operation of the above causes. This explanation may appear complicated, but if the disease were not of a complicated nature the profession would long ago have been agreed regarding it. With this preface I shall commence my narrative, to show the difficulty of distinguishing the primary from the secondary form of cholera, where it has not previously been studied in its purely epidemic form, unmixed with endemic causes.

In September, 1848, and again in June of the present year, "choleraic malaise," such as you have so well described, prevailed here to a very considerable extent, but only two or three isolated cases acknowledged as cholera occurred, for these anomalous derangements of health were not generally recognised as dependent on that epidemic cause. So little, indeed, was this the case, that I was obliged to submit to some ridicule of my perpetual prescription of quinine and iron at these periods. It was not till August that the disease was considered established in Manchester, when it broke out suddenly in one of the Union Workhouses. Singularly enough this happened at a time when it appeared to me that there was absolutely less of the choleraic influence in the town than there had been three or four weeks before.

This assertion may not appear to you so paradoxical as it may to others, but requires some explanation. At the periods above mentioned, fever, when not of the maculated exanthematous typhus, was of that low congestive type alluded to in my lectures as belonging to cholera, with chill mottled skin, dark contracted veins of the extremities, precordial pains, black tongue, tendency to morning remissions and to frequent relapse. Quotidian ague was also frequently met with. Unwonted attacks of epilepsy and sudden death, from apparently insufficient causes, occurred; and among the out-patients, hemicrania, facial neuralgia, and sciatica, as well as "pinching pains," were remarkably prevalent. Some suffered from slight hemiplegia, and sleeping of the hands and feet at night, giddiness on rising, and irritation of the bladder. Excessive uterine and hæmorrhoidal hæmorrhages, and hæmoptysis, were frequent; and almost every one answered inquiries on the subject by naming some particular hour at which they suffered daily from chills or cold sweats. In all these cases the tongue was peculiarly pale and clean, and the nails were marked, as in ague, with a red crescentic line, about an eighth of an inch from their free edge; the veins were dark and contracted on the backs of the hands, and the blood refilled them sluggishly after they were emptied by pressure. Thus evidence of every kind was presented of diminished energy in the capillary circulation, and of excess of blood in the

veins of the chest, brain, and abdomen, with tendency to diurnal exacerbation of congestion. This condition was always as readily relieved by a few doses of quinine and iron, used as invariably as in your experience. It also very frequently happened that the same pale tongue and contracted superficial veins occurred in patients suffering from other more obvious diseases; and I generally found it advisable to give two or three doses of the mixture to remove complication, before treating the complaint by the usual methods. When I perceived in all this such decided evidence of the choleraic influence, and especially when violent choleraic purging became exceedingly frequent in the first week of July, with all its appropriate symptoms of blue nails, clean pale tongues, and cramps lasting for three or four hours, and then ceasing till the same hour next day, I could not doubt that there would soon be ample opportunity for my sceptical friends to satisfy themselves that what I had asserted of cholera in my lectures was true, both in theory and practice. In this, however, I was disappointed, a very sudden change took place in the character of disease. The week before almost every tongue had been pale, now the majority were red and furred; choleraic malaise and diarrhoea almost ceased to occur, and acute inflammatory dysentery now prevailed over the whole town, with violent tenesmus and hæmorrhage from the ulcerated bowels, which required depletion and very active treatment. This complaint was so universal, that chalk and opium mixtures were kept ready in most of the factories for the use of those who were taken ill at work. Nevertheless there was no cholera in the town during the first three weeks of this epidemic dysentery, or only a very few isolated cases; in the meantime, those whose tongues were pale, generally complained of unusual constipation. On the 17th of August, however, cholera broke out suddenly at the Chorlton Workhouse, eight of the inmates dying in one night. I tendered my services, and made my first visit on the 20th, when upwards of a score had then died. There were then three patients in a state of hopeless collapse, evidently moribund, as warmth had commenced in the lower extremities. There were also several convalescents. I directed a mixture of quinine and iron to be kept in readiness, and administered freely to any who might be attacked. Next day the three I had seen were dead, but three others were taken ill in the night; yet, notwithstanding their having been very sufficiently dosed with my mixture, they were all three far advanced in fatal collapse. I was assured by the nurse that they could not retain the mixture, and they all complained it made them worse. This I had difficulty in believing, for when I had given it to others, even within a few weeks, in some severe cases of choleraic diarrhoea and vomiting with cramps, the patients had invariably expressed an immediate sense of relief; nevertheless I convinced myself that such really was the case. But this was not the only circumstance that struck me as different from what I had been accustomed to witness in cholera, and there could not be a doubt that all three were labouring under that disease. First, those who died yesterday did not do so

till several hours after warmth had commenced in the lower extremities, and with only a very slight convulsion. I had seldom seen this the case more than twenty minutes before life terminated, with severe tetanic affection of the whole frame. Those then before me had little or no cramps, and very little jactitation; the heart, instead of struggling irregularly, beat feebly and calmly; the stools, neither colorless nor inodorous, were of a brownish fluid, that smelt like water in which bones had been macerated; the tongue was cold, but not perfectly pale, and some irregular patches of mucous fur remained attached to the surface; the suppression of urine was not complete in all; and there was no incessant urgency in their thirst for cold water; yet the nails were blue, the veins contracted, and the skin like wet leather. They were rapidly dying of cholera, but it was through exhaustion by purging, not from venous congestion. Hitherto I had only seen these cases in a state of fatal collapse, and was excessively puzzled. The mystery, however, was soon cleared up. As we crossed the court-yard some of the men attracted our attention to an idiot boy, whom they had observed several times going to stool, vomiting and purging. His complexion was good; his voice natural; the skin warm; the circulation in the veins of the hands free; the nails not blue; the pulse good, rather sharp; the tongue hot and red at the edges, and furred. He bore pressure on the epigastrium, and he made water. I said at once to the surgeon in attendance—this is not cholera; “then,” said he, “it soon will be, for it is thus they all begin, and I much doubt whether this boy is not already too far gone to be saved from collapse.” I declined to prescribe, as it was not *my cholera*, and I wished to see the result. He was well treated with lead and opium, calomel, &c. But the surgeon was right; he soon became collapsed, and died that night. Indeed, I think you will agree with me, that we were both right; it was not cholera, but soon became cholera.

It is unnecessary here to enter into the causes of this outbreak of disease, which were shortly epidemic dysentery, rendered putrid and contagious by imperfect drainage, overcrowding and underfeeding; but these defects in management were already undergoing improvement. In not one of these cases did the symptoms of true cholera make their appearance at that time till the vital powers had been previously reduced by very active purging, accompanied with warm tongue and extremities.

On examining the rest of the inmates of the workhouse, for the most part persons of broken constitutions, several of the most feeble were found suffering from various slight forms of choleraic malaise, but by no means so much so as might have been anticipated, there being only sufficient evidence in the characteristic pale clean tongue, and dark contracted appearance of the superficial veins, to show the presence of the influence, but in no powerful degree.

It was only after thus recognising the putrid dysentery of our cellar population in the incipient stage and premonitory diarrhoea of this outbreak of cholera, and seeing it gradually give place to collapse, that I could

comprehend the descriptions of the cases reported from the purlieus of London and the Tooting establishment, and see distinctly the cause of the undeniable communication of the disease by contagion, in many well authenticated instances; in fact I soon began myself to suffer for the freedom with which I had used the stethoscope before I had detected the true nature of the disease. I was sharply attacked with vomiting and purging, which was relieved by emetics, and found it necessary to go to the country to recruit. This, however, gave me the opportunity of inquiring into the nature of the disease in other places, and I learned that at that time it almost invariably commenced with diarrhoea, which had not been so decidedly the case in the early part of the year, and that it was now more decidedly limited than formerly to places in which the sources of putrid exhalation were most obvious; that cramps now scarcely occurred; thus displaying how generally it prevailed during the autumn in its secondary form.

If the distinction here attempted to be accounted for, and which has been drawn more in detail in my letter to Dr. Hall, be as decidedly established as I feel satisfied they ultimately will be, by the comparison of experience in different seasons of the year, or in different places at the same time, little will be required to be said respecting treatment, for its *rationale* will be rendered more obvious and more exact, by considering the primary or purely epidemic disease to consist in deficiency of capillary action, and consequent venous congestion, from the first; whereas, the other must be regarded as a diametrically opposite condition in the first instance, in which overactivity of the secreting vessels requires to be subdued, in order to husband the strength and maintain the resistance of the vital powers against the influence that would produce choleraic collapse, if present, or in its absence be necessary to oppose the tendency to syncope and death.

It appears to me clear, that those who have seen most of the disease, in its foulest haunts, have met with the secondary form of cholera almost exclusively, but mixed with, perhaps, five or six per cent. of the simple congestive disease, unpreceded by diarrhoea, and that these cases they have mistaken. Appalled by the greater suddenness and severity of the symptoms, they have generally considered these hopeless from the first, and rendered them so by following a practice essential in the secondary form, but actually injurious in this; and by bestowing their whole attention on the attempt to restrain the purging, to the neglect of the congestion and algid symptoms, they have allowed those very patients to die, the severity of whose cramps and sufferings ought to have pointed them out as most certainly and most immediately curable.

So strong is my conviction of the sure reliance that may be placed in the correct application of the practice which you have followed in the treatment of the primary congestive form of cholera, notwithstanding the great severity of the symptoms, that I cannot but consider you to have rendered a most essential service to the

profession, by affording that evidence which is at present most wanted to establish the existence of a distinction so important.

Believe me to be, dear Sir,

Yours very faithfully,

CHARLES W. BELL, M.D.

94, Mosley Street, Manchester,

December 8th, 1849.

Provincial Medical & Surgical Journal.

WEDNESDAY, DECEMBER 26, 1849.

EVER since the first announcement of the intended application for a new Charter by the College of Surgeons, we have been anxiously expecting some official explanation of the proposed alteration in the constitution of the College. In this, however, we have been hitherto disappointed, for beyond the general report, that members of twenty years' standing, in the possession of testimonials, and on the payment of ten guineas, would be added to the list of Fellows, no hint has reached us on this subject—so interesting to all who have the well-being of the profession at heart.

Nothing can be more self-evident than that a gross injustice was committed in the carrying out the Charter of 1843; but it is equally clear that nothing can now undo the act of the Council at that time in office, short of an entire abandonment of the *principles* upon which that Charter was granted. It is now too late to inquire whether those principles were good or bad—whether it was just to make the distinction at all into the two classes of Fellows and Members; and therefore we can only expect the present Council to make what atonement may lie in their power, for the mal-administration, by their predecessors, of the powers given them by the Charter, which if fairly carried out, would, we think, have been accepted as a boon by the whole profession.

We are sincerely of opinion that the majority of the present Council are anxious to conciliate the members at large by every means in their power, and we do not well see in what other way they can effect their object more satisfactorily than in the manner proposed. It is obvious that in extending the Fellowship there must be some line drawn, for if all were included it would be only substituting one name for another. Now, we think that age, coupled with respectability,

as guaranteed by the signatures of six Fellows, is the best criterion which can be selected under the unfortunate circumstances in which we have been placed. There may be some hardship in requiring a fee of ten guineas, but it would be still more hard to admit men of twenty years' standing now, without payment of a fee, after demanding and receiving ten guineas from men of even thirty years' standing and upwards, together with an examination, as has been hitherto the case. Taking, then, all the difficulties of the position in which the College officials are placed, we are certainly of opinion that, *as far as regards the Fellowship*, the proposed plan, if carried out, ought to be accepted as the *amende honorable*; and if this compromise should be accompanied by a measure of reform in the general constitution of the examining bodies;— if the College of Surgeons should come forward, and by co-operating with the College of Physicians, should offer to the profession a Board of Examiners, which might form a common portal to the different departments into which the practice of our art has hitherto been divided, we trust that all old grievances would be buried in oblivion, and that we should one and all of us exert ourselves in carrying out the plans necessary for such a comprehensive measure of educational improvement. There never has been so favourable a time as the present within the memory of man, and we trust that it will not be allowed to slip by, but that the College authorities will take the matter earnestly in hand, and prevent the necessity for the formation of the projected College of General Practitioners, which can only act as a fresh element of discord in our already disorganized ranks.

Reviews.

Medical Ethics; or a Code of Institutes and Precepts adapted to the Professional Conduct of Physicians and Surgeons. By the late DR. PERCIVAL. Third Edition.

Code of Ethics of the American Medical Association. Pamphlet. pp. 36.

THAT the intercourse of man with man should be swayed by certain arbitrary rules, has been acknowledged by the general experience of ages, and in all classes of men, whether living under a civilized, or what we somewhat arrogantly choose to denominate, a *savage*, regime. This is a fact so well established

that not only is it admitted by the well-ordered sections of the community, but even the disorderly and the immoral are compelled to subscribe to its justice. "Honour among thieves" has become a proverb.

It is a fortunate thing too, seeing the necessity for ethical ordinations, that mankind in general tacitly concedes the point; and that taking society throughout its whole extent, from that of the highest "*ton*" to its dregs, there is for the most part little inclination to run counter to what custom or convenience has allotted as rules of social conduct. We allude of course to no other than the arbitrary and in some respects, comparatively unimportant regulations of life, for by a strange paradox, a man will oftentimes scrupulously attend to them, while he cares nought for those higher moral obligations, the observance of which not only renders him a happier man here, but is imperatively required for his wellbeing hereafter.

That which has been found so necessary for the social government of mankind in general, has also been thought requisite, in a modified degree, for particular sections of society, and among them for the guidance of professional intercourse. But strange to say, for the medical profession alone has it appeared important to *publish* a code of laws, by which their individual and collective conduct is to be regulated. It may well be asked what there is in the profession of the healing art, to require a sign post to good behaviour more than in that of the law or divinity; and why the ordinary and well-acknowledged dictates of gentlemanly feeling and Christian temper, should not suffice for it as for the others. The question we leave for others to solve; all that we can say upon the matter is, that so it is; the fact remains, that, (to the best of our knowledge at least,) the medical profession is the only one which has a published code of ethics.

Granting, however, that the want of such a published code exists, however humiliating the admission must be, it is satisfactory to know, that as far as a profound acquaintance with professional weaknesses, and a truly upright mind, could enable a man to frame a code of laws for the regulation of the intercourse of medical men, we have all that is wanted in Dr. Percival's code of ethics, a new edition of which has recently appeared, and which in the present disturbed state of medical polity, is well worthy the attention of our readers. We are not, however, so sanguine as to expect that those who are irregular in their professional conduct, will become altered men by the simple perusal of this excellent essay; for we know that the majority of those who systematically disgrace their calling, by derogatory practices, do so with the full consciousness that they are transgressors; they cannot plead ignorance, but are actuated by a deficiency of moral sense, which a mere acquaintance with the rules of propriety will not rectify. Of what avail would it be with the licensed charlatan, with his

mountebankery of infinitesimals;—the receiver of the chemists' per centage;—the medico-chirurgical vendor of tooth brushes, and eau de cologne;—the triune representative of the doctor, barber, and grocer,—to have the written evidence of his delinquencies before his eyes? None we fear whatever; he knows that he is doing wrong; but self and mammon are to him of far greater importance than the honour of the profession he desecrates, or even than his individual respectability.

Still, hopeless as may be the endeavour to instil any feelings of shame into the minds of those who knowingly violate the laws of medical decorum, there are doubtless, some, and we willingly believe not a few, whose divarications from the path of honourable practice arise from want of information as to what their demeanour should be under the various circumstances contingent upon their avocations. To such Dr. Percival's maxims offer a ready and trustworthy guide. We can none of us, however, be the worse for studying them, and we sincerely hope the benevolent Editor's object will be fully answered in an extended distribution of his labours.

The American code of ethics is based upon that of Dr. Percival, and appears in every way deserving of the attention of the profession. If all we read be true, they want instruction on these matters in the United States, still more than in England.

Proceedings of Societies.

BATH AND BRISTOL BRANCH

OF THE

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

*Quarterly Meeting, held on Thursday, September 27.**

Mr. Crouch, of Bruton, read a paper "On Ovariectomy, illustrated by a dried preparation of a large tumour removed by him. (Since published in the *Journal*.)

Mr. Swayne having had a very large experience in cases of this nature, though thinking the operation might occasionally be needed, would hesitate to recommend it, unless he found the tumour very rapidly increasing, causing much distress, and evidently endangering life. He felt convinced that a certain number of patients suffering from ovarian disease would live a longer period if the symptoms were merely palliated than if they had been operated on. He did not mean to say that some cases might not require the operation, but in these there was great risk in the probability of adhesion being formed when the peri-

toneum was laid open, which adhesion could not previously be ascertained, so that in ordinary cases patients stand a better chance of living by the diseased ovary being let remain.

Mr. Vicary fully concurred with the views of Mr. Swayne, and narrated several cases confirmatory of it.

Mr. Jennings then detailed some cases illustrating the different types fever will occasionally assume from the modifications apparently induced by a local cause. In several cottages close together on the margin of a semi-stagnant brook, some patients had suffered from diarrhoea; others from constipation; while others laboured under erysipelatous inflammation.

Mr. King mentioned some facts of the same kind.

Mr. Colthurst described the following case of diseased hip-joint, for the purpose of showing the marked advantage of a long wooden splint (from the arm-pit to the ankle) in ensuring the perfect rest, so absolutely necessary to stop diseased action. He explained that it in nowise interferes with the requisite daily observation, nor the varied local applications usually adopted during the first stage of the complaint, whilst in the second it permits exercise on crutches at a very early period, much earlier than otherwise would be safe. He also specially directed attention to the very great comfort and convenience to the patient of being placed in the prone position, on a bed or mattress, so elevated at the head as to form a slight incline downwards to the feet, a point that all must feel to be of considerable importance when the usual difficulties of affording amusement or occupation to the youthful patient, during this tedious and painful disease, are borne in mind.

CASE.

M. A. Thorn, aged 7 years, was admitted under Mr. Colthurst, at the Clifton Dispensary, May 3rd, 1849. Her mother reported that in September, 1848, she first observed the child to limp, but thought nothing of it, as she was considered to be imitating one of her companions, who was lame. This gait continuing, and indeed increasing, induced her to consult a surgeon, at the Hotwells, who told her that there was disease of the hip-joint, for which he treated the child by directing her to be kept quiet (without any special instructions as to the mode of doing so,) by using salt water baths, administering some powders, and blistering the joint, until in February, 1849, the child getting worse, was taken to a physician, who prescribed four leeches to the groin, hot salt-water pads to the hip, and cod-liver oil internally, during about eight weeks, when the pain in the joint became so intense that he applied some very strong poison, (*sic*) with a view to allay it, and ordered the child to be allowed to remain in any position that seemed most comfortable to her, and a leather apparatus to fix the limb, as nothing could prevent her having a stiff joint. In this state of affairs, to avoid continued expense, she was admitted at the Dispensary, and upon being visited at her own house, was found to be suffering from such extreme pain as scarcely to permit the clothes to be

* Concluded from page 551.

touched without screaming. She was lying with the limb drawn up, and the knee over, and above, its fellow; the buttock flattened; the joint swollen and hot; the whole appearance of the child indicating that continued irritative fever which so strongly marks extensive organic mischief. Under these circumstances the prognosis was that the most fortunate result to be hoped for would be to avoid a dislocation, and to obtain an anchylosed joint. To effect this, she was placed in a prone position, on an inclined plane, and the limb gradually brought down, during several successive days, to nearly a straight line, when the long splint was applied, fixing the end under the arm-pit by a strap over the opposite shoulder, the centre by a band round the waist, and the lower portion by three separate straps round the knee and ankle. A spirit lotion, with iodide of potass to the joint, and a mixture, with syrup of iodide of iron internally, were prescribed. In a few days the lessening of the sympathetic fever, and also of the local heat, was very evident, and the same treatment was continued, more or less, for three months, without removing the splint, or leaving the prone position, although during this period she suffered from measles, and a subsequent attack of diarrhoea. At the end of the three months she was allowed to get up (with the splint on) and walk upon crutches, her leg being of the same length as its fellow, and the foot placed quite level on the ground, parallel with its neighbour. In September she continued to enjoy her walking, and has free power over the limb. Her health much improved.

Mr. Crouch mentioned a case at present under his treatment, wherein he obtained perfect immobility of the hip-joint, by a composition formed of white of egg and flour. Strips of linen were dipped in the composition, and laid from the pelvis to the knee; other longitudinal strips were crossed by transverse ones, thus forming a firm case.

Mr. Hensley had successfully treated cases by adopting a mode somewhat similar. After putting the limb into a proper position, strips of old sheeting were covered with a compound of mucilage and fine whiting, the advantage of which was, that on the addition of moisture a casing was easily modified in shape, or removed.

Mr. Colthurst observed that the points he wished specially to bring before the meeting were the advantages of the central aperture permitting local applications to the joint, and the comfort of the prone position to a juvenile patient.

BIRMINGHAM PATHOLOGICAL SOCIETY.

MAY 3RD, 1849.

MR. RUSSELL IN THE CHAIR.

Acute pleurisy, fatal in three days, by a needle penetrating through the chest into the lungs.

Dr. Heslop, in the absence of Mr. Baker, under whose care the patient was admitted, exhibited the preparation and gave the following particulars of the case:—

Samuel Butwell, aged 15, was admitted into the Hospital on the 30th of April. On the day before admission a sewing needle had accidentally entered the right side, close to the inferior angle of the scapula and to its inner side. The attempts made by his friends to extract the needle only pushed it further out of reach. The subsequent efforts towards the same object proved equally unsuccessful. The next day feebleness of respiration existed at the base of the right lung, which rapidly increased, and in spite of assiduous efforts to control the inflammation, on the 2nd of April he died.

The right lung is covered by a thick layer of soft lymph. The needle is seen fixed in the substance of the lung, towards its inferior posterior part. It had penetrated obliquely. The right pleura contained about a pint and a half of pus, in which floated numerous flakes of lymph.

This case adds another proof, if any were wanting, of the great rapidity with which the characteristic effusion of inflammation may take place even to a very great extent. This boy was in perfect health previous to the accident.

JUNE 7TH, 1849.

Emphysematous lungs, containing a few tubercles: dilated right cavities of the heart.

Dr. Fletcher communicated the case of — Hill, a labourer in the Iron Works, aged 50, who was admitted into the General Hospital December 8th, 1848. He had been ill six weeks. His appearance was pale and cachectic, and of extreme imbecility of mind, so that it was impossible to gain from him any history of the case. He says he was taken ill about six weeks since, and has since suffered from great debility and a pain at the pit of his stomach. Tongue slightly furred; slight but continued cough; bowels regular; thirst; appetite bad; chest everywhere clear upon percussion; respiratory murmur universally marked by sibilant and coarse mucous rattles; respiration difficult on exertion. Empl. Lyttæ. pectori; R. Hydrarg. cum Rheo., gr. x., omni nocte.—R. Ammon. Sesquicarb., scr. ij.; Vini. Ipecac., dr. ii.; Mist. Camph., oz. viij. Cap., oz. j., ter indies.

10th.—Urine 1024, feebly alkaline; turbid by heat; cleared up by nitric acid.

After this date he continued in the hospital until the end of February, still continuing counter-irritation to the chest, and various remedies to promote expectoration and relief from his bronchial affection. He went out somewhat relieved in his general symptoms, but the physical signs of the chest still continued pretty nearly the same, namely, clear percussion and feeble respiration, accompanied by mucous rattles.

On the 5th of May he applied for re-admission, labouring under extreme dyspnoea, cough, and feeling of great affection at the chest. His legs were swelled, and he had effusion into the cavity of the abdomen. He had also at this time a soft systolic murmur, most distinct at the base of the heart. Chest clear on percussion, and mucous rattles all over. He had great

difficulty in coughing up the bronchial secretions; pulse feeble and quick. App. Emp. Lyttæ. Sterno 8 x 8 inches.—R. Ext. Color. C.; Ext. Hyoscyami. utr., gr. ij.; Elaterii., gr. 1-12th. M. fiat Pil. quartis horis sumenda.

6th. Much the same. Repetantur Pilulæ sextis vel octavis horis.—R. Ammon. Sesquicarb., scr. j.; Vin. Ipecac., dr. ij.; Spt. Æth. Nit., oz. ss.; Mist. Camphoræ, oz. viijss. M. Cap. cochlearia magna duo quartis horis.

10th.—The same, but rather feeble.

13th.—Great prostration had come on, and he was ordered two wine glasses of brandy.

14th.—Much improved. He was very anxious for some green vegetables, and was ordered a small quantity of cabbage daily.

16th.—Two glasses of wine. He seems more comfortable.

17th.—Much improved as to his debility, but the chest and general effusions continue the same.

Rept. Pil. Elaterii octavis horis. Omit Vin. Ipecac. in Mist. Ammon. Sesquicarb.

18th.—The pills have acted well, and the respiration is much improved. To omit all remedies and take lemonade, with one wine glassful of gin to the quart of it. On the 19th he died.

Post-mortem examination.—*Head*:—Brain and its membranes healthy. *Chest*:—Pleura healthy; lungs generally emphysematous, and large bullæ at the anterior edges; bronchia generally dilated; mucous membrane inflamed and loaded with mucus; at the inferior portion of the right lung there were numerous small miliary tubercles for about the space of a large orange. The right side of the heart was greatly dilated, and the tricuspid valve, so far distended as to admit with facility four fingers. The mitral aortic valves and aorta healthy. *Abdomen*: Liver weighed 2lbs. 10oz., compact, and in a commencing state of cirrhosis; spleen firm, weighs four ounces and a half; pancreas natural, weighs four ounces and a half; stomach and intestines healthy but congested; kidneys natural but congested, weight five ounces each.

Psoas abscess behind the right kidney, communicating with its pelvis.

Dr. Fletcher related the following case:—

J. H. Baker, aged 43, much worn down by the effects of disease, was admitted an in-patient under Dr. F., in the General Hospital, March 13th, 1849. He complained of a sense of tightness across the middle of the abdomen, and that he had at times difficulty in passing urine, which had occasionally been very muddy. He had lost much flesh, and his appetite, and was at times thirsty and feverish.

On examination his head and chest seemed free from disease; the liver was pushed forwards, and seemed to occupy more space than natural; and the region of the bladder was full. He was admitted more to investigate his disease, which appeared to be a malignant affection, not confined to any particular organ of the abdomen.

The treatment consisted in keeping the secretions in

as good a state as possible, and the bowels open, and giving as much nourishment as the patient could take with comfort to himself. The state of the organs of the abdomen remained about the same; the passing of the urine became so difficult that it was directed to be drawn off night and morning with the catheter. The urine, which was quite clear upon his admission, after about a week began to be slightly purulent, and at length became much loaded with pus, but this varied in extent, for at times it was much loaded, and at others nearly free under the microscope. The sediment was clearly seen to be formed of pus globules. Without any alteration of the indications of his disease, he became gradually weaker, and died on the 19th of April, 1849. The only morbid change suspected was some purulent formation communicating with the ureters near the kidney.

Post-mortem examination on the 19th of April, twenty-four hours after death.—Body much emaciated; right hypochondriac region prominent, and dull upon percussion; the organs of the head and chest were in a normal state. *Abdomen*: Liver pale and fatty, but of its normal size, but much pushed forward by a psoas abscess, situated behind the right kidney; pancreas and spleen healthy; stomach and intestines healthy; left kidney rather enlarged, and very soft, the tubular portion atrophied, its pelvis much dilated, and its ureter much dilated also, and tortuous; right kidney in the same state as the left, its pelvis much dilated, and communicating posteriorly with an abscess situated behind it; its ureter also much dilated; the bladder much dilated and hypertrophied; the prostate much enlarged.

The abscess situated behind the right kidney was confined within the sheath of the psoas muscles, which was much diminished in size, and very soft. It was bounded above by the diaphragm; below it came down as far as the bones of the pelvis. Anteriorly it had the liver and right kidney, and posteriorly the muscular structure of the lumbar region. It did not come in contact with bone in any situation. The bones of the lumbar vertebræ were perfectly healthy in every respect.

(To be continued.)

Foreign Department.

FRANCE.

Autoplasty in Denudation of the Testicles.

Wounds of the scrotum, with extrusion of the testicles, are not uncommon, and for the most part the accident is treated by replacing the organ, and the application of sutures; but it occasionally happens, as a result of injury as well as of disease, that gangrene of the scrotum ensues with denudation of the testicles. Nature, it is true, possesses great resources in remedying the deformity, as large breaches of tissue have been known to be replaced by granulation; but in some instances the testicles become further denuded as cicatrized.

trization advances, and some process is required to give the organ the envelope it has lost. In two cases of this kind M. Malgaigne detached the adhering edges of the scrotum, and making an incision into the cellular tissue, placed the testicles within, and covered them by drawing forward the skin, and retaining it *in situ* by ligature. A similar case has been reported by M. Goyrand, (*Revue Medico-Chirurgicale*, Sept., 1849,) in which, after sutures had failed, the object was attained by the use of collodion. The latter gives the following general directions in cases of this kind :—

If the wound be recent, the extruded testicle must be replaced and maintained by suture or collodion. If the loss of substance be of older date, and the edges of the cicatrix adhere to the posterior part of the testicle, the adhesion must be separated, and the folds of skin brought in front of the testicle and united.

Collodion in Burns.

M. Vallette, surgeon to the Hotel Dieu in Lyons, uses collodion extensively in the treatment of burns. The first effect produced by its application is refrigeration, it also contracts the infiltrated tissues, and effectually excludes the air. It has been observed, moreover, that the resulting cicatrization is more regular than under other forms of dressing.

On the Influence of Pregnancy upon the progress of Phthisis.

It is an opinion of very ancient date, and, we believe, of pretty general acceptance, that the course of phthisis is modified, or may even be suspended by the occurrence of pregnancy. This opinion has, however, been contested in some quarters, and among others, by Andral and Louis. Latterly, M. Grisolle, (in a memoir presented to the Academy of Medicine,) has collected twenty-seven cases of phthisis coinciding with pregnancy. Of these twenty-seven cases, there were only three in which the rational signs of consumption preceded the pregnancy. In the remainder, the first symptoms of the disease appeared during the early months of gestation. These facts are sufficiently demonstrative of the commencement of tubercular disease under conditions generally thought to be adverse to its manifestation. M. Grisolle has further ascertained, by statistical inquiry, that so far from pregnancy delaying the fatal termination, the disease would appear to progress more rapidly in pregnant than in other females. In fourteen cases examined in reference to the duration of phthisis, he finds the average to be ten months, while in non-pregnant women it appears, according to Louis, to be fifteen months. In so far, therefore, as these few observations go, there appears to be no foundation for the opinions generally entertained.

Influence of Cholera upon Pregnancy and the Fætus.

In the *Gazette Médicale* of October 13th, this question is investigated by M. Bouchut. The result of inquiries seems to be that the pregnant state is no safeguard against cholera, and that after the third month abortion generally occurs, if the attack of cholera lasts

beyond twenty-four hours. In those more rapid cases, the woman often dies without expulsion of the uterine contents. The effects on the fœtus are generally fatal, even where premature labour occurs, as at the seventh or eighth months; the infant is born asphyxiated. [This we have ourselves witnessed.]

On the Effects of Bleeding and Low Diet on the Development of the Fætus.

M. Depaul terminates a long essay with the following conclusions:—1. Blood-letting and low diet have an incontestable influence on the development of the fœtus during its intra-uterine life. 2. This fact may be made available in practice in certain cases of deformed pelvis, and may take the place of premature delivery. 3. It is less likely to succeed in those cases in which dystocia has arisen from an exaggerated size of the fœtus. 4. Low diet has more influence in keeping the growth of the fœtus in check than bleeding.

GERMANY.

On Infantile Typhus.

Dr. Friedleben, (*Archiv. für Physiol. Heilkund.*) has studied four epidemics of typhus among the infant population. During the three years 1844, 45, 46, he had under his charge 1842 infants, of whom ninety-eight were the subjects of typhus.

The pathological anatomy of the disease is spoken of at great length, and especial attention is given to the lesions of the intestinal tube, lymphatic glands, spleen, and kidneys.

The Peyerian patches were observed to be tumefied, in proportion to their proximity to the ileo colic valve. The surface of the patches was rough, and of a livid colour. The coats of the intestines were, for the most part, unaffected. The solitary glands were less often ulcerated than the aforesaid agminated glands. The intestinal mucous membrane is generally healthy. The mesenteric glands are as constantly diseased; they are in general red and tumid, especially at the commencement of the malady. Sometimes they are soft and infiltrated.

We pass over the lesions of other organs, and give the following general *resumé* of the memoir:—

1. The glands of Peyer, and the mesenteric glands, are the local expression of infantile typhus.
2. During the first three weeks the lesion is limited to simple follicular inflammation; subsequently the patches become indurated, and ulcerate.
3. Disease of the spleen proceeds *pari passu* with that of the intestine.

On the Generic Import and Development of the Upper Germinal Layer in the Ovum of Vertebrate Animals

[This interesting paper by M. Remak appears in *Müller's Archives*, No. 2, 1849, and has been translated in the *Medical Times*, from which we quote.]

In the communication to the Berlin Academy, from which the following is translated, the author states that he has long wished to discover the generic import of

the upper germinal layer. In the summer of 1848 he obtained a solution of the question.

When the scutiform thickening of the germinal disc appears, (the "embryonalschild" of Baer,) three definite layers may be distinguished in the germinal disc. In this thickening only the upper and the middle layers partake, the under layer being not concerned in it. This latter layer, which forms the epithelium, not only of the intestinal tube, but also that of the air-tube, the cellular parenchyma of the liver, the pancreas, the kidneys, the thyroid, and the thymus, I propose to name the *gland-layer*. The scutiform central parts of the upper and middle germinal layers grow together in their long axis. By this confluence commences the axil plate or primitive streak of Baer, from which proceed the medullary plate, the primordial vertebral plates, and the chorda. The medullary plate is thus connected with the free part of the upper germinal layer, while the primordial vertebral plates are connected with the middle layer. Both upper and middle germinal layers show a thickening, which encircles the axil structures, and is a residue of the double shield, not partaking in the glands produced from the tubular hair-germs, which are in their turn developed from the deep pigmentary part of the horn-layer. But, in any case, these observations now communicated exhibit a novel and surprisingly simple law of development for the higher vertebrata—to wit, a middle layer which develops the nerves and vessels, a central nervous system, and two non-vascular and nerveless outer layers.

AMERICA.

Treatment of Dysentery by Injections of Nitrate of Silver and Creosote.

By PROFESSOR FLINT.

The nitrate of silver, as we know, in analogous instances of inflamed mucous tissue, for example, in conjunctivitis, pharyngitis, &c., exerts a surprising effect in diminishing and arresting inflammatory action. It has been employed, to some extent, in dysentery, and is recommended by some practical writers, but, so far as we know, is by no means in common use. In one case we resorted to a solution of the crystals of the nitrate of silver, ten grains to the ounce, with marked benefit. The tenesmus and frequent dejections were relieved in a striking degree, and the discharge of mucus and blood was much diminished. To secure the good effects of this application, it is desirable that the injection be made to pass up the intestine as high as practicable, in order to bring it into contact with a larger portion of the inflamed surface. We found the best instrument at hand to be a female bone syringe, with a long pipe, terminating by a perforated bulbous extremity. Perhaps a solution of greater strength might be even more serviceable. The patient was a child four years of age. The application occasioned, apparently, little or no pain—not more than the ordinary enemas of starch and laudanum. Another remedy

employed in the same case was a creosote mixture. We have used this remedy in two cases; in one of chronic dysentery of long standing, the effect was good, but not extraordinary. In the case recently under treatment, we first employed it in connection with the tincture of opium, and found that the enemas were retained, when with the laudanum alone, they were immediately expelled. We employed, at first, a mixture for each injection (oz. ss.) containing two minims of creosote. Subsequently we employed the creosote alone, increasing the quantity to four minims, and the good effects were striking. The relief of the local symptoms was quite as great as when the opium was given in combination, the disadvantages of the latter being avoided. We feel confident that this will prove a valuable remedy in the dysentery, and we therefore are solicitous that our readers should make trial of it. We do not, of course, suggest these as remedies intended to supersede other therapeutical measures, but only as useful auxiliaries thereto.—*Buff. Med. Journ.*—*New York Journ.*, Sept.

Treatment of Fracture of the Clavicle by means of a new Instrument.

By J. B. COLEMAN, M.D.

This instrument and its mode of action upon himself is thus spoken of and described by Dr. Coleman:—

It was so arranged, that force applied to the ends of a lever at the sound shoulder, should produce the motions that were necessary to draw the fractured ends of the bone into true anatomical position, and hold them there, with but slight inconvenience to the patient. To do this, the apparatus was in the form of a shoulder brace, made of steel, and in outline nearly resembling the clavicle joined together at the back. The space occupied by each clavicle was left open, or in other words, the steel work surrounded each bone, so that it could move considerably within the included space. The space over the scapula of the injured side was covered with buckskin, tight as a drum head, so as to make resistance on that part, and prevent motion; the other side was left open to allow free motion of that shoulder. The central part of the back brace had a long pad resting upon about eight inches of the spine. This prevented excoriation when force was applied. The extremity of the brace, on the side of the injury, projected farther laterally than the axilla, and above the deltoid projection of the shoulder. From this point a strap, furnished with a buckle for adjustment, passed down through the head of a wedged-shaped pad placed in the axilla. From the other side of the brace, two ends projected, one above corresponding with the first named, the other lower down, on a line with the bottom curves of the brace. From these ends, straps proceeded to attach to a sling in which the arm of the injured side was suspended. The strap from the upper end buckled to the upper part of the sling, near the wrist, and that from the lower end, to the inner and lower part of the sling, somewhere about the middle of the forearm.

The operation of this arrangement is obvious. We

have here a lever of the simplest kind. The power, the weight of the arm of the affected side, drawing by the hand, as occasion may require, on the straps connected with the ends of the shoulder brace last described—the fulcrum, the backbone; the resistance, the shoulder of the broken clavicle. The direction of the force upon the injured part is upward, outward, and backward; the means of retaining the bone in position simple, always at command, and not the least impediment to the mechanical movements of the ribs. The only point liable to excoriation is the axilla, and with this apparatus, less than any other.

To prevent the brace from sinking on the back, and to guard against any lateral swerving, a piece of wood or metal about two inches wide is made, so as to have sufficient elasticity, is attached to the central piece, extending down the spine, and adapted to its curvatures. This reaches somewhere near the waist, and is secured by a belt passing around the body.

Fifteen days after the fracture of a collar bone, I applied this apparatus to myself. Up to this time the slightest jar caused a movement between the ends of the bone, and unless the bandages were intolerably tight, perfect adaptation seemed impossible. From this instant, position was easily maintained, no movement seemed to disturb the bone, I was able to ride over rough roads without the least inconvenience, and when union took place there was what is extremely rare after these accidents, not the smallest distortion of outline. This experiment led me to use the apparatus in many other cases in which the results have been the same.—*N. J. Med. Rep.—New York Journal of Medicine, Sept.*

460 "Extroduction" of the Bougie for Stricture.

BY PROFESSOR BRAINARD.

Professor Brainard, in the *N. W. Med. and Sur. Journal*, gives the history of a case where the patient had suffered for eleven years from stricture of the urethra following gonorrhœa; retention of urine had almost become perfect; the patient complained of great pain and a constant desire to void urine, with the ability to pass only a few drops at a time. Various careful but ineffectual attempts were made to pass the bougie; the bladder had risen several inches above the pubes nearly to the umbilicus. The bladder was now punctured above the pubes with the long curved trochar and the stylet withdrawn. As soon after the operation as the state of the parts would admit, long and persevering attempts to pass the bougie were made, but without success. Near the posterior extremity of the spongy portion of the urethra was a knotty projection, beyond which the instrument would not pass. The thought now occurred to Dr. B., that the prostatic and membranous portion of the urethra could be explored by means of an instrument passed in the bladder through the opening made by the puncture, and still occupied by the canula. The attempt was made by means of a small-sized bougie rendered firm by means of a stiff wire bent to form the segment of a circle. Very little difficulty was met with in the attempt to pass it. By

a very little exertion the point of the instrument was brought to within two inches of the orifice of the urethra and then seized by means of a pair of forceps, the wire was withdrawn and the open end of the bougie passed into the bladder. The instrument was allowed to remain for three days, when it was withdrawn and a larger one substituted. Larger instruments were used from time to time until one above the medium size passed without the least difficulty. One month after the first operation the cure was nearly complete. The following practical deductions are drawn by Dr. B. from this case:—

1st. The puncture of the bladder above the pubes, if care be taken to prevent infiltration of urine, is a slight operation, and should not be deferred till extreme distension takes place. In further proof of this, we would refer to a case published not long since in the *Buffalo Medical Journal*, by our friend Dr. J. P. White, of that city. In that case a puncture of the kind served as a substitute for a urethra for a long time with but trifling inconvenience.

2nd. This puncture may be made useful in catheterism. For this operation of passing a catheter forwards, which so far as we are aware, has not been done before, a friend has suggested the name of *Extroduction*. It may be performed with a properly curved instrument very readily, and if difficulties should occur, they may be obviated by passing the finger into the rectum. If the cases in which it is likely to be useful are rare, they are extremely urgent, and when they occur this operation may prove a valuable means of relief.—*Ibid.*

Polypiform Concretions.

Dr. Meigs believes that the white concretions formed in the heart before death are in all cases the result of an anæmic state of the system; the blood has a greater tendency to coagulate. He is led to this opinion from the fact, that in animals bled to death, the last portions of blood coagulate more readily than the first. The practical value of this opinion is illustrated by a reference to cases of hæmorrhage, after labour, in which the danger of the formation of the heart clot on suddenly raising the patient is forcibly pointed out. The time required for extinguishing life on the occurrence of this accident is various; death may be instantaneous, as in the case of the Princess Charlotte, or it may not occur until the formation of the cardiac polypus has given rise to the concretionary phenomena of effusion into the cavities of the pericardium, pleura, &c. The symptoms are,—sudden failure of the pulse, with deadly pallor, and gasping respiration. Dr. Meigs discusses the possibility of recovery after the occurrence of the coagulum, and decides, that whether it is small or large, the chances are greatly against the patient; if large, death is inevitable.—*Philadelphia Med. Exam., March.*

ARSENIC IN SULPHURIC ACID.

To the Editor of the Provincial Medical and Surgical Journal.

SIR,—The presence of arsenic in sulphuric acid, and consequently in muriatic acid, and all the compounds into which these enter, is—I think you will agree with me—a subject deserving the attention of your readers.

That the fact is as I have stated, there is what I consider incontrovertible evidence to prove. In some lectures “On the Nutritive Value of different Articles of Food,” delivered in the University of Oxford by Dr. Daubeny, and which I read only a few weeks since, it is stated incidentally, by way of caution to persons using muriatic acid and soda in making unfermented bread, that they should see that the acid they employ is free from arsenic, for that a friend of the Professor found the whole of his family seriously disordered from the use of unfermented bread, made by his cook under his own directions, owing to the muriatic acid employed containing arsenic.

Upon reading this, I wrote to Dr. Daubeny, who very kindly referred me to his friend Dr. Charles W. Henry, who had made the discovery, and by him I have been favoured with a highly interesting account of the particulars, more strictly medical than could properly have been given in a popular lecture. Dr. Henry says, “My attention was forcibly called to the question of impurities present in the common muriatic acid, by the injurious effects of bread made on the non-fermented principle, upon my own family and myself. In all, nausea and severe pains in the stomach followed its use, (continued for three weeks before discovery;) in some, instant vomiting and irregularity of bowels, though not actual diarrhoea; and in one case, (my footman) the outbreak of the eczema arsenicale.

“I lost no time in testing the acid for metallic impurities, but not happening to have any sulphuretted hydrogen, could at first detect nothing. When I procured some, I was astounded by its throwing down a dense yellow precipitate, which I at first suspected to be tin, (from knowing that the manufacturers also made muriate of tin) but soon discovered to be arsenic.”

There is not, I believe, any notice of the existence of arsenic in sulphuric acid in any English chemical work; but Dr. Henry found the fact fully stated in the large German edition of Berzelius, who attributes it to the employment in the manufacture of sulphuric acid, of a native sulphur or sulphuret holding arsenic; and Dr. Daubeny, in the valuable lectures before alluded to, says—“Our supply of sulphur is derived at present from two sources, namely, the sulphur mines of Sicily, and the copper pyrites of this country. The former is entirely free from arsenic, and may therefore be safely employed in the production of sulphuric acid, but the latter always contains more or less of it, and should therefore be carefully avoided, as it imparts it to the acid products generated by its combustion.”

Dr. Henry refers to a paper in the Manchester Society's memoirs, vol. vi., p. 590, by Mr. Watson, (a pupil of Dalton's) who ascertained that 1,000 grains of concentrated sulphuric acid contained $5\frac{1}{2}$ grains of arsenious acid. Mr. Watson also analysed some of the

muriatic acid employed as before stated by Dr. Henry, and established the presence of arsenic by all the known tests.

The liability of sulphuric acid to contain arsenic is thus established beyond all doubt, and although the minute doses in which the extremely dilute acid of the Pharmacopœia is prescribed, may be insufficient to occasion deleterious effects, the larger proportion that enters into the composition of the neutralized sulphates, renders it desirable that some mode should be adopted to render the acid employed for all medicinal purposes chemically pure.

I am, Sir, very truly yours,

A. W. DAVIS.

Prestcign, Dec. 6, 1849.

P.S.—Since writing the above, it has occurred to me that as all sulphur made from pyrites must be contaminated with arsenic, it follows that the common sulphur (S. sublimatum) must be so, and this people are in the habit of taking in considerable quantity without medical advice.

Is it not possible that some of the cases of suspected poisoning, where arsenic has been found in the stomach after death, may have had this origin?

ON

NEURALGIA FOLLOWING HERPES ZOSTER.

To the Editors of the Provincial Medical and Surgical Journal.

GENTLEMEN,—My experience in regard to the neuralgic pains which accompany, or rather follow, the disease of the skin, known by the name of herpes zoster, so exactly corresponds in many points with that of Mr. Giraud, that I cannot help adding my testimony to his, as to the facts of the case. During eight and twenty years practice I witnessed a large number of cases of this disease, and I believe in not a single case was there an absence of the neuralgic pains to which Mr. Giraud alludes. I do not recollect, when referring to authors who have treated upon this disease, to have observed any particular remarks made relative to the above, I think, important symptom. I will further add, that I could generally tell my patient pretty correctly as to when these pains would subside; for I observed that it had reference not to the more or less severe form of the disease, but to the age of the individual, continuing longer in proportion as the person was older. In a young patient of fourteen or sixteen the pains would be completely gone in six or eight weeks. And, on the other hand, after seventy years of age, the pains would continue to distress the sufferer more or less for a couple of years, and even longer. Experience and observation, therefore, would lead one to arrive at a very near approximation of the truth on this head, and we should be able to predicate pretty accurately by considering the age of the patient, as to when the pains would altogether leave.

Another marked feature in these cases is the circumstance that the pains are at first continuous, then there are short intervals of ease, and these intervals become longer and longer, until they altogether subside; but

generally the latter pains are, in point of severity, as acute as the first. These two last features of the disease I have observed in neuralgic complaints very frequently, quite unconnected with the disease under discussion. According to my experience it is especially so in regard to neuralgic pains of the face.

My observations again coincide with those of Mr. Giraud and his friend in London, as to the inefficacy of any means intended for relief or cure. Beyond the occasional use of opiates I know none. But here the medical man may be useful to his patient, if not by prescribing medicines, at any rate by soothing his mind with the comfortable and honest assurance, that though the pains are bad and severe, they will lead to no evil consequences. Whenever I attended a person afflicted with herpes zoster, I always told him or her what must be expected after the eruptive part of the disease was gone; and many, many times have I been thanked subsequently for having given this information. My friends have told me, that but for what I had said, and the confidence they had in that opinion, they should have supposed they were affected with some internal complaint. If the eruption had been over the chest, their fears would have led them to conclude that disease existed either in the heart or lungs; or if over the loins, then that the kidneys were affected, and so of other parts. The mind, then, being calmed and prepared to look forward towards the best result, the best result would follow, helped, I make no doubt, by not being harassed continually with the idea that some serious internal malady was making sure and certain progress.

I do not pretend to account for these pains, but suppose they must be connected with the reflex system of nerves; for certainly the cutaneous ones are those which are involved in the inflammatory part of the disease at first, but the patient does not refer the subsequent pains to the skin as their locality, but to the deeper-seated organs.

I have written more than at first I intended, and whether you will think these observations worth inserting in the *Provincial Medical and Surgical Journal* or not, I leave to your judgment.

I am, gentlemen,

Your very obedient servant,

PETER MARRIOTT.

Aberystwith, December 14, 1849.

NEURALGIA FOLLOWING HERPES ZOSTER.

To the Editors of the *Provincial Medical and Surgical Journal*.

GENTLEMEN,—Will you allow me to suggest to your correspondent, Mr. Giraud, as *one of the best remedies* in this very troublesome disorder, the application of a blister, *near, or over* the painful part: immediately it is healed let there be applied a piece of belladonna plaster on leather, and I can assure Mr. G., that from some experience, I can testify to the value of this plan.

The neuralgia is always relieved, and generally removed; the stimulus of the vesication, followed by the sedative influence of the belladonna, appearing to exhaust the morbid influence, (or whatever else we like

to call it,) on which the pain depends, and healthy function following, the patient is cured.

Of course in all such cases we must attend to the general health; but I do not believe that all the tonics of the Pharmacopœia would ever cure a local neuralgia, *excited apparently* by the morbid secretion of a previous disease.

Excuse my thus troubling you, but I know the value of a *single hint* too well, to deny it to a brother practitioner.

I remain, Gentlemen,

Yours respectfully,

EDWARD HUMPAGE.

Redland, Bristol, Dec. 15, 1849

NEURALGIA FOLLOWING HERPES ZOSTER.

To the Editor of the *Provincial Medical and Surgical Journal*.

SIR,—I have perused with much interest the letter of Mr. F. Giraud which appeared in the last number of the *Journal*, "*On Neuralgia following Herpes Zoster.*" During the last seven years I have met with several cases in which severe pain, of a neuralgic character, affected the seat of the eruption. These principally occurred in elderly persons; and after using a variety of medicines, I found that this distressing *sequela* yielded most readily to grain doses of the oxide of silver, combined with the compound galbanum pill and extract of hyoscyamus. I likewise employed, as an external application, the tincture of arnica montana, with the tincture of soap and opium, and as the results in all were most satisfactory, I feel justified in recommending this mode of treatment to the notice of your correspondent.

I am, Sir, your obedient servant,
SILAS PALMER, M.D.

Newbury.

CORRIGENDA IN MR. CROUCH'S PAPER ON OVARIOTOMY.

To the Editor of the *Provincial Medical and Surgical Journal*.

SIR,—I am reminded by a correspondent of the following errors in the "*Table of Cases of Ovariectomy*" published in the *Journal* of the 24th of last month, and shall be much obliged by your correcting them as early as possible. It appears that Dr. Clay has had only *ten* fatal cases instead of *twelve*.

Mr. Heath's case was one of extirpation of a diseased uterus, and not one of ovariectomy.

Mr. Elkington, of Birmingham, (whose name was misspelt Eltrington,) has had two cases, one fatal and the other successful.

I am also informed that Dr. Frederic Bird has had one unsuccessful case, but he has not replied to my inquiry on the subject.

I am, dear Sir, yours faithfully,

JOHN CROUCH.

Bruton, Somerset, December 17, 1849.

Medical Intelligence.

APPOINTMENTS.

Dr. Radclyffe Hall, of Clifton, has been elected Physician to the Bristol General Hospital, in the place of Dr. Beatty, resigned.

J. G. Lansdown, Esq., has been re-elected Surgeon to the Bristol General Hospital.

ROYAL COLLEGE OF SURGEONS: EXAMINATIONS FOR THE FELLOWSHIP.

Questions on the third day's examination, December 6th, 1849:—

Pathology and Surgery.—No. I.—1. In the two forms of erysipelas, simple and phlegmonous, what are respectively the principal symptoms, what the course and termination, and what the treatment, constitutional and local?

2.—What is the treatment to be adopted in a case of wound of the brachial artery, occurring in venesection?

3.—Describe the treatment of retention of urine from stricture in the urethra, and the consequences which are apprehended when the retention is not relieved.

4.—Describe the progress of a carbuncle from its commencement to its termination, when not arrested by treatment. Prescribe also the treatment, both constitutional and local, by which its progress may be arrested.

5.—Describe the characters of dislocations of the shoulder-joint, and the modes of reduction.

6.—What is the effect of opium on the system? What are the principal preparations which are in use? And what are the doses of each?

N.B.—Answers to any four of these questions will be accepted as sufficient, provided always that they are accurate and adequate.

Pathology and Surgery.—No. II.—1. Describe the nature and physiological consequences of asphyxia, its causes, especially those depending upon irrespirable gases, and the more important remedial measures required.

2.—State what is known with regard to the pathological changes in the blood.

2.—Describe the principal varieties of the pulse, and in what respect they may be severally regarded as diagnostic of morbid conditions of the system.

4.—Describe the morbid changes which take place in the urinary organs from long-continued irritation of the bladder or urethra; and explain in detail the causes of such changes.

5.—Describe the different methods by which a calculus may be removed from the bladder, and what the circumstances under which they may be severally indicated.

6.—Describe the various circumstances of surgical interest which attend a case of wounded intestine.

N.B.—Answers to any four of these questions will be accepted as sufficient, provided always that they are accurate and adequate.

NEW EXAMINERS.

Mr. Caesar Henry Hawkins, Surgeon to St. George's Hospital, has been elected by the Council of the Royal College of Surgeons, a member of the Court of Examiners, in the vacancy occasioned by the decease of Mr. John Goldwyer Andrews, of the London Hospital; this election also causes a vacancy in the Examining

Board of the University of London.—Mr. George Gabriel Stokes, M.A., of Pembroke College Cambridge, has been appointed Examiner in Mathematics; Mr. Goldwin Smith, M.A., of University College, Oxford, Examiner in Classics; and Mons. Brasseur, Professor of French Language, in King's College, has also been appointed an Examiner in French.

ROYAL COLLEGE OF SURGEONS.

Gentlemen admitted Fellows on Friday, December 7th, 1849:—Walter Goodyer Barker, Worthing, diploma dated October 25th, 1839; Frederick John Butler, Winchester, May 8th, 1840; George Washbourne Charleton, Gloucester, July 3rd, 1835; William Druitt, Wimborne-Minster, Dorsetshire, July 30th, 1841; Nathaniel John Dampier, Woburn Place, Russell Square, May 24th, 1844; Tharp Mountain Girdlestone, Lincoln's Inn Fields, January 3rd, 1845; Raymond Levi Haynes, Holloway, March 9th, 1841; George William Hind, Alfred Place, Bedford Square, November 3rd, 1827; Richard Hodges, Rochford, Essex, July 31st, 1843; Edward Charles Hulme, Maisonette, Totness, Devon, April 12th, 1844; Robert George Mager, Highgate, May 15th, 1829; Edwin Morris, Spalding, Lincolnshire, April 22nd, 1839; John Marshall, Crescent Place, Mornington Crescent, August 9th, 1844; William Potts, South Audley Street, May 3rd, 1839; Augustin Prichard, Red Lodge, Bristol, October 30th, 1840; Edward Ray, Dulwich, Surrey, April 5th, 1839; Ebenezer Smith, Billiter Square, March 18th, 1831; Henry Smith, Caroline Street, Bedford Square, April 24th, 1846; George Carrick Steet, Chadwell Street, Islington, July 3rd, 1849; John Wiblin, Southampton, June 2nd, 1837; Thomas Henry Wakley, Guildford Street, Russell Square, July 25th, 1845.

Gentlemen admitted Members on Friday, Dec. 14th, 1849:—Edward Akers, Halifax, Yorkshire; John Willington Clement, Pocklington, Yorkshire; Nathaniel Crisp, Bristol; Henry Horlock, Newport, Isle of Wight; Alfred Howse, London; Crosby Leonard, Bristol; Daniel Meadows, Wilnesham, Suffolk; Charles M'Leod Murray, Sudbury, Suffolk; John Burdett Steward, Birmingham; Charles Augustus James Tompson, St. Helen's, Lancashire.

Gentlemen admitted Members on Tuesday, December 18th, 1849:—George Hewlett Bailey, London; John Weir Draper Brown, Viuctalling Yard, Deptford; Edward Somerset Cleveland, Trinchinopoly, Madras; David Alexander Douglas, Belfast; John Gaman, Hambleton, Hampshire; Cornelius Hanbury, Stoke Newington; William Bowen Mathias, Dublin; David Henry Monckton, Brenchley, Kent; Thomas Bolland Powell, Knaresborough, Yorkshire.

SOCIETY OF APOTHECARIES.

Gentlemen admitted Licentiates on Thursday, Dec. 6th, 1849:—John Alfred Bateman, Shadwell; Richd. Lee, Thame, Oxon.

Gentlemen admitted Licentiates on Thursday, Dec. 13th, 1849:—Robert Gething, Newport, Monmouth; William Harrison, Bedford; Sturley Payne, Bury St. Edmunds; Edward Pinder.

TO CORRESPONDENTS.

Communications have been received from Mr. Humphry, Mr. Digby Wyatt, Dr. Branson, Mr. Spooner. It is requested that all letters and communications be sent to J. H. Walsh, Esq., Foregate Street, Worcester. Parcels and books for review may be addressed to the care of Mr. Churchill, Princes Street, Soho.



